U.S. Application No. 10/709,739

Filing Date

May 26, 2004 Itzhak Bentwich

First Inventor Art Unit

1631

Examiner

Docket Number

CLOW, LORI A 050992.0302.CPUS00

Information Disclosure Statement

U.S. Patent Documents						
Examiner Initials	Cite No#	Publication Number	Publication Date	Name of Patentee		
N.	A1	US 6,573,099	06/03/03	Graham, Michael Wayne		
1)/ .	A2	US-20030108923	06/12/03	Tuschl, Thomas et al.		
	А3	US-20020086356	07/04/02	Tuschl, Thomas et al.		
	P2	US 6,720,138	04/13/04	Sharma; Praveen et al.		
	P25	US-20030228691	12/11/03	Lewis, David L. et al.		
	P26	US-20040086884	05/06/04	Beach, David H. et al.		
60	P60	US 20040053411	03/18/04	Cullen, Bryan R. et al.		

Foreign Patent	Docume	nts		•
Examiner Initials	Cite No#	Publication Number	Publication Date	Name of Patentee
W	B1	WO 01/75164	02/27/03	TUSCHL, Thomas et al.
12	B2	WO 02/44321	06/06/02	TUSCHL, Thomas et al.
	B3	WO 03/029459	04/10/03	TUSCHL, Thomas et al.
	B4	WO 01/68836	09/20/01	BEACH, David
	B5	WO 02/094185	11/28/02	BEIGELMAN, Leonid et al.
	Pf23	WO 2004/009779	01/29/04	VANCE BOWMAN, Vicki
	Pf24	WO 03/070903		MCSWIGGEN, James
	Pf31	WO 03/070884	08/28/03	McSWIGGEN, James et al.
	Pf33	WO 03/070918		McSWIGGEN, James et al.
1, 1	Pf34	WO 03/074654	09/12/03	McSWIGGEN, James et al.
K	Pf37	WO 2004/031412	04/15/04	NAKAMURA, Yusuke et al.

Examiner Signature: <u>//</u> Date Considered:

10/709,739 May 26, 2004

Filing Date First Inventor

Itzhak Bentwich 1631

Art Unit Examiner Docket Number

CLOW, LORI A 050992.0302.CPUS00

		Information Disclosure Statement
		NON PATENT LITERATURE DOCUMENTS
Examiner		
initials	Cite No#	Authors, Title, Journal, Date, Year, Pages, Volume
RS	20	LEE, R. C., R. L. FEINBAUM and V. AMBROS. The C. elegans heterochronic gene lin-4 encodes small RNAs with antisense complementarity to lin-14 Cell Dec 3 1993 843-854 75
1	30	WIGHTMAN, B., I. HA and G. RUVKUN. Posttranscriptional regulation of the heterochronic gene lin-14 by lin-4 mediates temporal pattern formation in C. elegans Cell Dec 3 1993 855-862 75
	40	GALLINARO, H., L. DOMENJOUD and M. JACOB. Structural study of the 5' end of a synthetic premessenger RNA from adenovirus. Evidence for a long-range exon-intron interaction. J Mol Biol. Jul. 15 1994 205-225 240
	50	LU, C. and R. BABLANIAN. Characterization of small nontranslated polyadenylylated RNAs in vaccinia virus-infected cells Proc Natl Acad Sci U S A Mar 5 1996 2037-2042 93
	60	CRAWFORD, E. D., E. P. DEANTONI, R. ETZIONI, V. C. SCHAEFER, R. M. OLSON and C. A. ROSS. Serum prostate-specific antigen and digital rectal examination for early detection of prostate cancer in a national community-based program. The Prostate Cancer Education Council Urology Jun 1996 863-869 47
	70	Engdahl HM, Hjalt TA, Wagner EG. A two unit antisense RNA cassette test system for silencing of target genes. Nucleic Acids Res. Aug 15 1997 3218-27 25
	80	SMITH, D. S., P. A. HUMPHREY and W. J. CATALONA. The early detection of prostate carcinoma with prostate specific antigen: the Washington University experience Cancer Nov 1 1997 1852-1856 80
	90	DSOUZA, M., N. LARSEN and R. OVERBEEK. Searching for patterns in genomic data Trends Genet Dec 1997 497-498 13
	100	MOSS, E. G., R. C. LEE and V. AMBROS. The cold shock domain protein LIN-28 controls developmental timing in C. elegans and is regulated by the lin-4 RNA Cell 1997 637 88
	110	FIRE, A., S. XU, M. K. MONTGOMERY, S. A. KOSTAS, S. E. DRIVER and C. C. MELLO. Potent and specific genetic interference by double-stranded RNA in Caenorhabditis elegans. Nature Feb 19 1998 806-811 391
	120	WATERHOUSE, P. M., M. W. GRAHAM and M. B. WANG. Virus resistance and gene silencing in plants can be induced by simultaneous expression of sense and antisense RNA Proc Natl Acad Sci U S A Nov 10 1998 13959-13964 95
	130	NGO, H., C. TSCHUDI, K. GULL and E. ULLU. Double-stranded RNA induces mRNA degradation in Trypanosoma brucei Proc Natl Acad Sci U S A Dec 8 1998 14687-14692 95
	140	VERMA, S. and F. ECKSTEIN. Modified oligonucleotides: synthesis and strategy for users Annu Rev Biochem ***No date in Pubmed*** 1998 99-134 67
	150	WUCHTY, S., W. FONTANA, I. L. HOFACKER and P. SCHUSTER. Complete suboptimal folding of RNA and the stability of secondary structures. Biopolymers Feb. 1999, 145-165, 49
	160	MATHEWS, D. H., J. SABINA, M. ZUKER and D. H. TURNER. Expanded sequence dependence of thermodynamic parameters improves prediction of RNA secondary structure. J Mol Biol May 21 1999 911-940 288
	170	CHANG, P. L. Encapsulation for somatic gene therapy Ann N Y Acad Sci Jun 18 1999 146-158 875
	180	ZHANG, M. Q. Large-scale gene expression data analysis: a new challenge to computational biologists Genome Res Aug 1999 681-688 9
4	190	GRISARU, D., M. STERNFELD, A. ELDOR, D. GLICK and H. SOREQ. Structural roles of acetylcholinesterase variants in biology and pathology. Eur J Biochem. Sep. 1999 672-686 264
	200	FIRE, A. RNA-triggered gene silencing Trends Genet Sep 1999 358-363 15

Examiner Signature:	Date Considered:
examiner Signature:	Date Considered.

U.S. Application No. Filing Date First Inventor

10/709,739 May 26, 2004 Itzhak Bentwich

Art Unit

1631

Examiner Docket Number CLOW, LORI A 050992.0302.CPUS00

	Information Disclosure Statement				
		NON PATENT LITERATURE DOCUMENTS			
Examiner					
Initials	Cite No#	Authors, Title, Journal, Date, Year, Pages, Volume			
	210	TABARA, H., M. SARKISSIAN, W. G. KELLY, J. FLEENOR, A. GRISHOK, L. TIMMONS, A. FIRE and			
1		C. C. MELLO. The rde-1 gene, RNA interference, and transposon silencing in C. elegans Cell Oct 15			
		1999 123-132 99			
	220	RYO, A., Y. SUZUKI, K. ICHIYAMA, T. WAKATSUKI, N. KONDOH, A. HADA, M. YAMAMOTO and N.			
l l		YAMAMOTO. Serial analysis of gene expression in HIV-1-infected T cell lines FEBS Lett Nov 26			
		1999 182-186 462			
	230	OLSEN, P. H. and V. AMBROS. The lin-4 regulatory RNA controls developmental timing in			
		Caenorhabditis elegans by blocking LIN-14 protein synthesis after the initiation of translation Dev Biol			
		Dec 15 1999 671-680 216			
1	240	TUSCHL, T., P. D. ZAMORE, R. LEHMANN, D. P. BARTEL and P. A. SHARP. Targeted mRNA			
		degradation by double-stranded RNA in vitro Genes Dev Dec 15 1999 3191-3197 13			
	260	REINHART, B. J., F. J. SLACK, M. BASSON, A. E. PASQUINELLI, J. C. BETTINGER, A. E. ROUGVIE,			
		H. R. HORVITZ and G. RUVKUN. The 21-nucleotide let-7 RNA regulates developmental timing in			
		Caenorhabditis elegans Nature Feb 24 2000 901-906 403			
ļ	270	PITT, J. N., J. A. SCHISA and J. R. PRIESS. P granules in the germ cells of Caenorhabditis elegans			
ļ		adults are associated with clusters of nuclear pores and contain RNA Dev Biol Mar 15 2000 315-333			
		219			
ļ	280	HAMMOND, S. M., E. BERNSTEIN, D. BEACH and G. J. HANNON. An RNA-directed nuclease			
1		mediates post-transcriptional gene silencing in Drosophila cells Nature Mar 16 2000 293-296 404			
		LOUACK 5 LAN DAGGON 7 LINE W AMPROOF II D. HODWITZ LO. DUNKUN The E. AA DROO			
	300	SLACK, F. J., M. BASSON, Z. LIU, V. AMBROS, H. R. HORVITZ and G. RUVKUN. The lin-41 RBCC			
		gene acts in the C. elegans heterochronic pathway between the let-7 regulatory RNA and the LIN-29			
	010	transcription factor Mol Cell Apr 2000 659-669 5			
	310	FORTIER, E. and J. M. BELOTE. Temperature-dependent gene silencing by an expressed inverted			
	320	repeat in Drosophila Genesis Apr 2000 240-244 26 MOURRAIN, P., C. BECLIN, T. ELMAYAN, F. FEUERBACH, C. GODON, J. B. MOREL, D. JOUETTE,			
	320	A. M. LACOMBE, S. NIKIC, N. PICAULT, K. REMOUE, M. SANIAL, T. A. VO and H. VAUCHERET.			
		Arabidopsis SGS2 and SGS3 genes are required for posttranscriptional gene silencing and natural virus			
		resistance Cell May 26 2000 533-542 101			
	330	SIJEN, T. and J. M. KOOTER. Post-transcriptional gene-silencing: RNAs on the attack or on the			
		defense? Bioessays Jun 2000 520-531 22			
	340	BRENNER, S., M. JOHNSON, J. BRIDGHAM, G. GOLDA, D. H. LLOYD, D. JOHNSON, S. LUO, S.			
}	0.0	MCCURDY, M. FOY, M. EWAN, R. ROTH, D. GEORGE, S. ELETR, G. ALBRECHT, E. VERMAAS, S.			
		R. WILLIAMS, K. MOON, T. BURCHAM, M. PALLAS, R. B. DUBRIDGE, J. KIRCHNER, K. FEARON, J.			
ļ .		MAO and K. CORCORAN. Gene expression analysis by massively parallel signature sequencing			
		(MPSS) on microbead arrays Nat Biotechnol Jun 2000 630-634 18			
	350	RYO, A., Y. SUZUKI, M. ARAI, N. KONDOH, T. WAKATSUKI, A. HADA, M. SHUDA, K. TANAKA, C.			
		SATO, M. YAMAMOTO and N. YAMAMOTO. Identification and characterization of differentially			
1		expressed mRNAs in HIV type 1-infected human T cells AIDS Res Hum Retroviruses Jul 1 2000 995			
		1005 16			
	360	NILSSON, M., G. BARBANY, D. O. ANTSON, K. GERTOW and U. LANDEGREN. Enhanced detection			
		and distinction of RNA by enzymatic probe ligation. Nat Biotechnol. Jul. 2000. 791-793. 18			
	370	KENT, W. J. and A. M. ZAHLER. Conservation, regulation, synteny, and introns in a large-scale C.			
	<u> </u>	briggsae-C. elegans genomic alignment Genome Res Aug 2000 1115-1125 10			
	380	KENNERDELL, J. R. and R. W. CARTHEW. Heritable gene silencing in Drosophila using double-			
	<u> </u>	stranded RNA Nat Biotechnol Aug 2000 896-898 18			

Examiner Signature:	Date Considered:	

10/709,739 May 26, 2004

Filing Date First Inventor

Itzhak Bentwich

Art Unit

1631

Examiner Docket Number CLOW, LORI A 050992.0302.CPUS00

****		NON PATENT LITERATURE DOCUMENTS
Examiner		
Initials	Cite No#	Authors, Title, Journal, Date, Year, Pages, Volume
	390	SMITH, N. A., S. P. SINGH, M. B. WANG, P. A. STOUTJESDIJK, A. G. GREEN and P. M.
		WATERHOUSE. Total silencing by intron-spliced hairpin RNAs Nature Sep 21 2000 319-320 407
	410	VOINNET, O., C. LEDERER and D. C. BAULCOMBE. A viral movement protein prevents spread of the gene silencing signal in Nicotiana benthamiana Cell Sep 29 2000 157-167 103
	420	Mette MF, Aufsatz W, van der Winden J, Matzke MA, Matzke AJ. Transcriptional silencing and promoter methylation triggered by double-stranded RNA. EMBO J. Oct 2 2000 5194-201 19
	430	YANG, D., H. LU and J. W. ERICKSON. Evidence that processed small dsRNAs may mediate
	400	sequence-specific mRNA degradation during RNAi in Drosophila embryos Curr Biol Oct 5 2000 1191
	440	ANANDALAKSHMI, R., R. MARATHE, X. GE, J. M. HERR, JR., C. MAU, A. MALLORY, G. PRUSS, L.
		BOWMAN and V. B. VANCE. A calmodulin-related protein that suppresses posttranscriptional gene
		silencing in plants Science Oct 6 2000 142-144 290
	450	FAGARD, M., S. BOUTET, J. B. MOREL, C. BELLINI and H. VAUCHERET. AGO1, QDE-2, and RDE-1
		are related proteins required for post-transcriptional gene silencing in plants, quelling in fungi, and RNA
		interference in animals Proc Natl Acad Sci U S A Oct 10 2000 11650-11654 97
 	460	PASQUINELLI, A. E., B. J. REINHART, F. SLACK, M. Q. MARTINDALE, M. I. KURODA, B. MALLER,
	''	D. C. HAYWARD, E. E. BALL, B. DEGNAN, P. MULLER, J. SPRING, A. SRINIVASAN, M. FISHMAN, J.
		FINNERTY, J. CORBO, M. LEVINE, P. LEAHY, E. DAVIDSON and G. RUVKUN. Conservation of the
		sequence and temporal expression of let-7 heterochronic regulatory RNA Nature Nov 2 2000 86-89
		408
	470	LLAVE, C., K. D. KASSCHAU and J. C. CARRINGTON. Virus-encoded suppressor of
		posttranscriptional gene silencing targets a maintenance step in the silencing pathway Proc Natl Acad
		Sci U S A Nov 21 2000 13401-13406 9
	480	COGONI, C. and G. MACINO. Post-transcriptional gene silencing across kingdoms. Curr Opin Genet
		Dev Dec 2000 638-643 10
	500	ELBASHIR, S. M., W. LENDECKEL and T. TUSCHL. RNA interference is mediated by 21- and 22-nucleotide RNAs. Genes Dev. Jan 15 2001 188-200 15
	510	BERNSTEIN, E., A. A. CAUDY, S. M. HAMMOND and G. J. HANNON. Role for a bidentate
		ribonuclease in the initiation step of RNA interference Nature Jan 18 2001 363-366 409
	520	VAUCHERET, H. and M. FAGARD. Transcriptional gene silencing in plants: targets, inducers and
		regulators Trends Genet Jan 2001 29-35 17
	540	THOMAS, C. L., L. JONES, D. C. BAULCOMBE and A. J. MAULE. Size constraints for targeting post-
1		transcriptional gene silencing and for RNA-directed methylation in Nicotiana benthamiana using a potato
		virus X vector Plant J Feb 2001 417-425 25
	550	GALYAM, N., D. GRISARU, M. GRIFMAN, N. MELAMED-BOOK, F. ECKSTEIN, S. SEIDMAN, A.
		ELDOR and H. SOREQ. Complex host cell responses to antisense suppression of ACHE gene
		expression Antisense Nucleic Acid Drug Dev Feb 2001 51-57 11
	560	SHARP, P. A. RNA interference2001 Genes Dev Mar 1 2001 485-490 15
	570	MALLORY, A. C., L. ELY, T. H. SMITH, R. MARATHE, R. ANANDALAKSHMI, M. FAGARD, H.
		VAUCHERET, G. PRUSS, L. BOWMAN and V. B. VANCE. HC-Pro suppression of transgene silencing
1 1		eliminates the small RNAs but not transgene methylation or the mobile signal Plant Cell Mar 2001 571-583 13
	590	MATZKE, M. A., A. J. MATZKE, G. J. PRUSS and V. B. VANCE. RNA-based silencing strategies in
] 390	plants Curr Opin Genet Dev Apr 2001 221-227 11
 	600	SCHISA, J. A., J. N. PITT and J. R. PRIESS. Analysis of RNA associated with P granules in germ cells
1 1/2	300	of C. elegans adults Development Apr 2001 1287-1298 128
	L	Total Constitution and Consideration (19) East 1200 120

Examiner Signature:	Date Considered:	

10/709,739 May 26, 2004 Itzhak Bentwich

Filing Date First Inventor Art Unit

1631

Examiner Docket Number CLOW, LORI A 050992.0302.CPUS00

		NON PATENT LITERATURE DOCUMENTS
Examiner	Ou - N - 4	Authors The Journal Bats Many Barres Volume
Initials	Cite No#	Authors, Title, Journal, Date, Year, Pages, Volume DI SERIO, F., H. SCHOB, A. IGLESIAS, C. TARINA, E. BOULDOIRES and F. MEINS, JR. Sense- and
	610	antisense-mediated gene silencing in tobacco is inhibited by the same viral suppressors and is
1		associated with accumulation of small RNAs Proc Natl Acad Sci U S A May 22 2001 6506-6510 98
		associated with accumulation of small rivas. Floc Nati Acad Sci 0.5 A. May 22 2001 6506-6510 96
	620	ELBASHIR, S. M., J. HARBORTH, W. LENDECKEL, A. YALCIN, K. WEBER and T. TUSCHL.
	""	Duplexes of 21-nucleotide RNAs mediate RNA interference in cultured mammalian cells Nature May
	•	24 2001 494-498 411
	630	PICCIN, A., A. SALAMEH, C. BENNA, F. SANDRELLI, G. MAZZOTTA, M. ZORDAN, E. ROSATO, C.
		P. KYRIACOU and R. COSTA. Efficient and heritable functional knock-out of an adult phenotype in
		Drosophila using a GAL4-driven hairpin RNA incorporating a heterologous spacer Nucleic Acids Res
		Jun 15 2001 E55-55 29
	640	VANCE, V. and H. VAUCHERET. RNA silencing in plantsdefense and counterdefense Science Jun
		22 2001 2277-2280 292
	650	ARGAMAN, L., R. HERSHBERG, J. VOGEL, G. BEJERANO, E. G. WAGNER, H. MARGALIT and S.
		ALTUVIA. Novel small RNA-encoding genes in the intergenic regions of Escherichia coli Curr Biol Jun
1		26 2001 941-950 11
	660	GRISHOK, A., A. E. PASQUINELLI, D. CONTE, N. LI, S. PARRISH, I. HA, D. L. BAILLIE, A. FIRE, G.
		RUVKUN and C. C. MELLO. Genes and mechanisms related to RNA interference regulate expression
		of the small temporal RNAs that control C. elegans developmental timing Cell Jul 13 2001 23-34
		106
	670	HUTVAGNER, G., J. MCLACHLAN, A. E. PASQUINELLI, E. BALINT, T. TUSCHL and P. D. ZAMORE.
1 1		A cellular function for the RNA-interference enzyme Dicer in the maturation of the let-7 small temporal
L		RNA Science Aug 3 2001 834-838 293
]	680	HAMMOND, S. M., S. BOETTCHER, A. A. CAUDY, R. KOBAYASHI and G. J. HANNON. Argonaute2,
		a link between genetic and biochemical analyses of RNAi Science Aug 10 2001 1146-1150 293
	700 .	VAUCHERET, H., C. BECLIN and M. FAGARD. Post-transcriptional gene silencing in plants J Cell Sci
		Sep 2001 3083-3091 114
	710	WESLEY, S. V., C. A. HELLIWELL, N. A. SMITH, M. B. WANG, D. T. ROUSE, Q. LIU, P. S.
1		GOODING, S. P. SINGH, D. ABBOTT, P. A. STOUTJESDIJK, S. P. ROBINSON, A. P. GLEAVE, A. G.
	j	GREEN and P. M. WATERHOUSE. Construct design for efficient, effective and high-throughput gene
		silencing in plants Plant J Sep 2001 581-590 27
	720	MATTICK, J. S. and M. J. GAGEN. The evolution of controlled multitasked gene networks: the role of
		introns and other noncoding RNAs in the development of complex organisms Mol Biol Evol Sep 2001
		1611-1630 18
 	730	CARTER, R. J., I. DUBCHAK and S. R. HOLBROOK. A computational approach to identify genes for
		functional RNAs in genomic sequences Nucleic Acids Res Oct 1 2001 3928-3938 29
	740	MOSS, E. G. RNA interference: it's a small RNA world Curr Biol Oct 2 2001 R772-775 11
	750	KETTING, R. F., S. E. FISCHER, E. BERNSTEIN, T. SIJEN, G. J. HANNON and R. H. PLASTERK.
1		Dicer functions in RNA interference and in synthesis of small RNA involved in developmental timing in
		C. elegans Genes Dev Oct 15 2001 2654-2659 15
	760	RUVKUN, G. Molecular biology. Glimpses of a tiny RNA world Science Oct 26 2001 797-799 294
 	770	LEE, R. C. and V. AMBROS. An extensive class of small RNAs in Caenorhabditis elegans. Science
		Oct 26 2001 862-864 294
1	780	LAU, N. C., L. P. LIM, E. G. WEINSTEIN and D. P. BARTEL. An abundant class of tiny RNAs with
		probable regulatory roles in Caenorhabditis elegans Science Oct 26 2001 858-862 294
	-	

Examiner Signature:	Date Considered:
EXAMMEL SUMBUME.	Dale Considered.

U.S. Application No. Filing Date First Inventor

10/709,739 May 26, 2004 Itzhak Bentwich

Art Unit

1631

Examiner Docket Number CLOW, LORI A 050992.0302.CPUS00

		information Disclosure Statement
· " ·		NON PATENT LITERATURE DOCUMENTS
Examiner		
Initials	Cite No#	Authors, Title, Journal, Date, Year, Pages, Volume
	790	LAGOS-QUINTANA, M., R. RAUHUT, W. LENDECKEL and T. TUSCHL. Identification of novel genes
1		coding for small expressed RNAs Science Oct 26 2001 853-858 294
	820	ITAYA, A., A. FOLIMONOV, Y. MATSUDA, R. S. NELSON and B. DING. Potato spindle tuber viroid as
1		inducer of RNA silencing in infected tomato Mol Plant Microbe Interact Nov 2001 1332-1334 14
		3
	830	MATTICK, J. S. Non-coding RNAs: the architects of eukaryotic complexity EMBO Rep. Nov. 2001
		986-991 2
	840	ELBASHIR, S. M., J. MARTINEZ, A. PATKANIOWSKA, W. LENDECKEL and T. TUSCHL. Functional
		anatomy of siRNAs for mediating efficient RNAi in Drosophila melanogaster embryo lysate Embo J Dec
		3 2001 6877-6888 20
	850	AMBROS, V. microRNAs: tiny regulators with great potential Cell Dec 28 2001 823-826 107
	860	BLASZCZYK, J., J. E. TROPÉA, M. BUBUNENKO, K. M. ROUTZAHN, D. S. WAUGH, D. L. COURT
		and X. JI. Crystallographic and modeling studies of RNase III suggest a mechanism for double-
		stranded RNA cleavage Structure Dec 2001 1225-1236 9
	870	CRETE, P., S. LEUENBERGER, V. A. IGLESIAS, V. SUAREZ, H. SCHOB, H. HOLTORF, S. VAN
1		EEDEN and F. MEINS. Graft transmission of induced and spontaneous post-transcriptional silencing of
		chitinase genes Plant J Dec 2001 493-501 28
	880	SMALLRIDGE, R. A small fortune Nat Rev Mol Cell Biol Dec 2001 867 2
	890	EDDY, S. R. Non-coding RNA genes and the modern RNA world Nat Rev Genet Dec 2001 919-929
		2
	900	LU, C. M. miRNA bead detection Genaco Biomedical Products PHS 398 2001 1
	910	MATZKE, M., A. J. MATZKE and J. M. KOOTER. RNA: guiding gene silencing 2001 1080 293
	920	GROSSHANS, H. and F. J. SLACK. Micro-RNAs: small is plentiful J Cell Biol Jan 7 2002 17-21 156
	930	MESHORER, E., C. ERB, R. GAZIT, L. PAVLOVSKY, D. KAUFER, A. FRIEDMAN, D. GLICK, N. BEN-
1		ARIE and H. SOREQ. Alternative splicing and neuritic mRNA translocation under long-term neuronal
		hypersensitivity Science Jan 18 2002 508-512 295
	940	PADDISON, P. J., A. A. CAUDY and G. J. HANNON. Stable suppression of gene expression by RNAi
	•	in mammalian cells Proc Natl Acad Sci U S A Feb 5 2002 1443-1448 99
	950	MOSS, E. G. MicroRNAs: hidden in the genome Curr Biol Feb 19 2002 R138-140 12
{	960	BANERJEE, D. and F. SLACK. Control of developmental timing by small temporal RNAs: a paradigm
		for RNA-mediated regulation of gene expression Bioessays Feb 2002 119-129 24
	970	ELBASHIR, S. M., J. HARBORTH, K. WEBER and T. TUSCHL. Analysis of gene function in somatic
		mammalian cells using small interfering RNAs Methods Feb 2002 199-213 26
	980	HAN, Y. and D. GRIERSON. Relationship between small antisense RNAs and aberrant RNAs
		associated with sense transgene mediated gene silencing in tomato Plant J Feb 2002 509-519 29
	000	
	990	NICHOLSON, R. H. and A. W. NICHOLSON. Molecular characterization of a mouse cDNA encoding
		Dicer, a ribonuclease III ortholog involved in RNA interference Mamm Genome Feb 2002 67-73 13
	1000	PUERTA-FERNANDEZ, E., A. BARROSO-DELJESUS and A. BERZAL-HERRANZ. Anchoring hairpin
1		ribozymes to long target RNAs by loop-loop RNA interactions Antisense Nucleic Acid Drug Dev Feb
		2002 1-9 12
1/	1010	GIORDANO, E., R. RENDINA, I. PELUSO and M. FURIA. RNAi triggered by symmetrically transcribed
		transgenes in Drosophila melanogaster Genetics Feb 2002 637-648 160
		1 . V

- · · · · ·		
Examiner Signature:	Date Considered:	

10/709,739 May 26, 2004

Filing Date First Inventor

Itzhak Bentwich

Art Unit Examiner 1631

Docket Number

CLOW, LORI A 050992.0302.CPUS00

		NON PATENT LITERATURE DOCUMENTS
Examiner		
Initials	Cite No#	Authors, Title, Journal, Date, Year, Pages, Volume
	1020	MARTENS, H., J. NOVOTNY, J. OBERSTRASS, T. L. STECK, P. POSTLETHWAIT and W. NELLEN.
}		RNAi in Dictyostelium: the role of RNA-directed RNA polymerases and double-stranded RNase Mol Biol
		Cell Feb 2002 445-453 13
ĺ	1030	MOURELATOS, Z., J. DOSTIE, S. PAUSHKIN, A. SHARMA, B. CHARROUX, L. ABEL, J.
ļ		RAPPSILBER, M. MANN and G. DREYFUSS. miRNPs: a novel class of ribonucleoproteins containing
		numerous microRNAs Genes Dev Mar 15 2002 720-728 16
1	1040	SEGGERSON, K., L. TANG and E. G. MOSS. Two genetic circuits repress the Caenorhabditis elegans
Ì		heterochronic gene lin-28 after translation initiation Dev Biol Mar 15 2002 215-225 243
	1050	MOREL, J. B., C. GODON, P. MOURRAIN, C. BECLIN, S. BOUTET, F. FEUERBACH, F. PROUX and
		H. VAUCHERET. Fertile hypomorphic ARGONAUTE (ago1) mutants impaired in post-transcriptional
1		gene silencing and virus resistance Plant Cell Mar 2002 629-639 14
	1060	CATALANOTTO, C., G. AZZALIN, G. MACINO and C. COGONI. Involvement of small RNAs and role
		of the qde genes in the gene silencing pathway in Neurospora Genes Dev Apr 1 2002 790-795 16
	1070	BOUTLA, A., K. KALANTIDIS, N. TAVERNARAKIS, M. TSAGRIS and M. TABLER. Induction of RNA
l		interference in Caenorhabditis elegans by RNAs derived from plants exhibiting post-transcriptional gene
		silencing Nucleic Acids Res Apr 1 2002 1688-1694 30
	1080	PASQUINELLI, A. E. and G. RUVKUN. Control of developmental timing by micrornas and their targets
		Annu Rev Cell Dev Biol Epub 2002 Apr 2. 2002 495-513 18
	1090	PADDISON, P. J., A. A. CAUDY, E. BERNSTEIN, G. J. HANNON and D. S. CONKLIN. Short hairpin
l l		RNAs (shRNAs) induce sequence-specific silencing in mammalian cells Genes Dev Apr 15 2002
		948-958 16
	1100	BECLIN, C., S. BOUTET, P. WATERHOUSE and H. VAUCHERET. A branched pathway for transgene-
		induced RNA silencing in plants Curr Biol Apr 16 2002 684-688 12
	1110	EDDY, S. R. Computational genomics of noncoding RNA genes Cell Apr 19 2002 137-140 109
	1120	LAGOS-QUINTANA, M., R. RAUHUT, A. YALCIN, J. MEYER, W. LENDECKEL and T. TÜSCHL.
!	1120	Identification of tissue-specific microRNAs from mouse Curr Biol Apr 30 2002 735-739 12
	1130	KENT, W. J. BLATthe BLAST-like alignment tool Genome Res Apr 2002 656-664 12
	1140	HUTVAGNER, G. and P. D. ZAMORE. RNAi: nature abhors a double-strand Curr Opin Genet Dev
		Apr 2002 225-232 12
	1150	NILSSON, M., J. BANER, M. MENDEL-HARTVIG, F. DAHL, D. O. ANTSON, M. GULLBERG and U.
1		LANDEGREN. Making ends meet in genetic analysis using padlock probes Hum Mutat Apr 2002
j j		410-415 19
	1160	PASQUINELLI, A. E. MicroRNAs: deviants no longer Trends Genet Apr 2002 171-173 18
	1170	LAI, E. C. Micro RNAs are complementary to 3' UTR sequence motifs that mediate negative post-
		transcriptional regulation Nat Genet Apr 2002 363-364 30
	. 1180	SCHWARZ, D. S. and P. D. ZAMORE. Why do miRNAs live in the miRNP? Genes Dev May 1 2002
		1025-1031 16
	1190	BRANTL, S. Antisense-RNA regulation and RNA interference Biochim Biophys Acta May 3 2002 15
		25 1575
	1200	LI, H., W. X. LI and S. W. DING. Induction and suppression of RNA silencing by an animal virus
		Science May 17 2002 1319-1321 296
	1210	ZAMORE, P. D. Ancient pathways programmed by small RNAs Science May 17 2002 1265-1269
	l	296

Examiner Signature:	Date Considered:	
Examiner Signature.	Date Considered:	

10/709,739 May 26, 2004

Filing Date First Inventor

Art Unit

Itzhak Bentwich 1631

Examiner Docket Number CLOW, LORI A 050992.0302.CPUS00

		NON PATENT LITERATURE DOCUMENTS
Examiner		
Initials Cite No#		Authors, Title, Journal, Date, Year, Pages, Volume
1220		CHEN, S., E. A. LESNIK, T. A. HALL, R. SAMPATH, R. H. GRIFFEY, D. J. ECKER and L. B. BLYN. A
,		bioinformatics based approach to discover small RNA genes in the Escherichia coli genome
		Biosystems Mar-May 2002 157-177 65
	1230	LEE, N. S., T. DOHJIMA, G. BAUER, H. LI, M. J. LI, A. EHSANI, P. SALVATERRA and J. ROSSI.
		Expression of small interfering RNAs targeted against HIV-1 rev transcripts in human cells Nat
. (Biotechnol May 2002 500-505 20
	1240	DRAGHICI, S. Statistical intelligence: effective analysis of high-density microarray data Drug Discov
		Today Jun 1 2002 S55-63 7
1	1250	SILHAVY, D., A. MOLNAR, A. LUCIOLI, G. SZITTYA, C. HORNYIK, M. TAVAZZA and J. BURGYAN. A
		viral protein suppresses RNA silencing and binds silencing-generated, 21- to 25-nucleotide double-
		stranded RNAs Embo J Jun 17 2002 3070-3080 21
]	1260	AYASH-RASHKOVSKY, M., Z. WEISMAN, J. DIVELEY, R. B. MOSS, Z. BENTWICH and G. BORKOW.
1 1		Generation of Th1 immune responses to inactivated, gp120-depleted HIV-1 in mice with a dominant Th2
		biased immune profile via immunostimulatory [correction of imunostimulatory] oligonucleotides
		relevance to AIDS vaccines in developing countries Vaccine Jun 21 2002 2684-2692 20
	1270	TABARA, H., E. YIGIT, H. SIOMI and C. C. MELLO. The dsRNA binding protein RDE-4 interacts with
ì		RDE-1, DCR-1, and a DExH-box helicase to direct RNAi in C. elegans Cell Jun 28 2002 861-871
		109
	1280	BETTENCOURT, R., O. TERENIUS and I. FAYE. Hemolin gene silencing by ds-RNA injected into
1 1		Cecropia pupae is lethal to next generation embryos Insect Mol Biol Jun 2002 267-271 11
	1290	HOOPER, N. M. and A. J. TURNER. The search for alpha-secretase and its potential as a therapeutic
		approach to Alzheimer s disease Curr Med Chem Jun 2002 1107-1119 9
	1300	LIU, Q., S. SINGH and A. GREEN. High-oleic and high-stearic cottonseed oils: nutritionally improved
		cooking oils developed using gene silencing J Am Coll Nutr Jun 2002 205S-211S 21
	1310	ZENG, Y., E. J. WAGNER and B. R. CULLEN. Both natural and designed micro RNAs can inhibit the
		expression of cognate mRNAs when expressed in human cells Mol Cell Jun 2002 1327-1333 9
	1320	MCMANUS, M. T., C. P. PETERSEN, B. B. HAINES, J. CHEN and P. A. SHARP. Gene silencing using
		micro-RNA designed hairpins Rna Jun 2002 842-850 8
	1330	REINHART, B. J., E. G. WEINSTEIN, M. W. RHOADES, B. BARTEL and D. P. BARTEL. MicroRNAs in
		plants Genes Dev Jul 1 2002 1616-1626 16
.	1340	MCCAFFREY, A. P., L. MEUSE, T. T. PHAM, D. S. CONKLIN, G. J. HANNON and M. A. KAY. RNA
		interference in adult mice Nature Jul 4 2002 38-39 418
	1350	HANNON, G. J. RNA interference Nature Jul 11 2002 244-251 418
	1360	DENNIS, C. The brave new world of RNA Nature Jul 11 2002 122-124 418
	1370	JACQUE, J. M., K. TRIQUES and M. STEVENSON. Modulation of HIV-1 replication by RNA
	1000	interference Nature Jul 25 2002 435-438 418
	1380	CULLEN, B. R. RNA interference: antiviral defense and genetic tool Nat Immunol Jul 2002 597-599
	1390	MA, C. and A. MITRA. Intrinsic direct repeats generate consistent post-transcriptional gene silencing in
	1030	tobacco Plant J Jul 2002 37-49 31
	1400	NOVINA, C. D., M. F. MURRAY, D. M. DYKXHOORN, P. J. BERESFORD, J. RIESS, S. K. LEE, R. G.
, ,		COLLMAN, J. LIEBERMAN, P. SHANKAR and P. A. SHARP. siRNA-directed inhibition of HIV-1
$oldsymbol{v}$		infection Nat Med Jul 2002 681-686 8

10/709,739 May 26, 2004 Itzhak Bentwich

Filing Date First Inventor

Art Unit

1631

Examiner Docket Number CLOW, LORI A 050992.0302.CPUS00

		INON DATENT LITERATURE ROCUMENTS
	\	NON PATENT LITERATURE DOCUMENTS
Examiner		
Initials	Cite No#	Authors, Title, Journal, Date, Year, Pages, Volume
	1410	POMERANTZ, R. J. RNA interference meets HIV-1: will silence be golden? Nat Med Jul 2002 659
\rightarrow		660 8
í	1420	ZENG, Y. and B. R. CULLEN. RNA interference in human cells is restricted to the cytoplasm. Rna. Jul.
		2002 855-860 8
	1430	XIANG, C. C., O. A. KOZHICH, M. CHEN, J. M. INMAN, Q. N. PHAN, Y. CHEN and M. J.
		BROWNSTEIN. Amine-modified random primers to label probes for DNA microarrays Nat Biotechnol
		Jul 2002 738-742 20
	1440	LLAVE, C., K. D. KASSCHAU, M. A. RECTOR and J. C. CARRINGTON. Endogenous and silencing-
		associated small RNAs in plants Plant Cell Jul 2002 1605-1619 14
	1450	RHOADES, M. W., B. J. REINHART, L. P. LIM, C. B. BURGE, B. BARTEL and D. P. BARTEL.
		Prediction of plant microRNA targets Cell Aug 23 2002 513-520 110
	1460	HIPFNER, D. R., K. WEIGMANN and S. M. COHEN. The bantam gene regulates Drosophila growth
		Genetics Aug 2002 1527-1537 161
	1470	LIU, Q., S. P. SINGH and A. G. GREEN. High-stearic and High-oleic cottonseed oils produced by
1		hairpin RNA-mediated post-transcriptional gene silencing Plant Physiol Aug 2002 1732-1743 129
l l		
	1480	STOUTJESDIJK, P. A., S. P. SINGH, Q. LIU, C. J. HURLSTONE, P. A. WATERHOUSE and A. G.
		GREEN. hpRNA-mediated targeting of the Arabidopsis FAD2 gene gives highly efficient and stable
		silencing Plant Physiol Aug 2002 1723-1731 129
	1490	SUZUMA, S., S. ÁSARI, K. BUNAI, K. YOSHINO, Y. ANDO, H. KAKESHITA, M. FUJITA, K.
		NAKAMURA and K. YAMANE. Identification and characterization of novel small RNAs in the aspS-yrvl
		intergenic region of the Bacillus subtilis genome Microbiology Aug 2002 2591-2598 148
1	1	
	1500	MILLIGAN, L., T. FORNE, E. ANTOINE, M. WEBER, B. HEMONNOT, L. DANDOLO, C. BRUNEL and
		G. CATHALA. Turnover of primary transcripts is a major step in the regulation of mouse H19 gene
		expression EMBO Rep Aug 2002 774-779 3
	1510	HAMILTON, A., O. VOINNET, L. CHAPPELL and D. BAULCOMBE. Two classes of short interfering
		RNA in RNA silencing Embo J Sep 2 2002 4671-4679 21
	1520	LEE, Y., K. JEON, J. T. LEE, S. KIM and V. N. KIM. MicroRNA maturation: stepwise processing and
- 1		subcellular localization Embo J Sep 2 2002 4663-4670 21
1	1530	KLAHRE, U., P. CRETE, S. A. LEUENBERGER, V. A. IGLESIAS and F. MEINS, JR. High molecular
- 1		weight RNAs and small interfering RNAs induce systemic posttranscriptional gene silencing in plants
- 1		Proc Natl Acad Sci U S A Sep 3 2002 11981-11986 99
	1540	PARK, W., J. LI, R. SONG, J. MESSING and X. CHEN. CARPEL FACTORY, a Dicer homolog, and
-		HEN1, a novel protein, act in microRNA metabolism in Arabidopsis thaliana Curr Biol Sep 3 2002
		1484-1495 12
	1550	JIANG, M. and J. MILNER. Selective silencing of viral gene expression in HPV-positive human cervical
		carcinoma cells treated with siRNA, a primer of RNA interference Oncogene Sep 5 2002 6041-604
1		21
	1560	MARTINEZ, J., A. PATKANIOWSKA, H. URLAUB, R. LUHRMANN and T. TUSCHL. Single-stranded
1	1	antisense siRNAs guide target RNA cleavage in RNAi Cell Sep 6 2002 563-574 110
	1570	ALLSHIRE, R. Molecular biology. RNAi and heterochromatina hushed-up affair Science Sep 13
	1	2002 1818-1819 297
	1580	REINHART, B. J. and D. P. BARTEL. Small RNAs correspond to centromere heterochromatic repeats
1		Science Sep 13 2002 1831 297
	1590	VOLPE, T. A., C. KIDNER, I. M. HALL, G. TENG, S. I. GREWAL and R. A. MARTIENSSEN. Regulation
J.		of heterochromatic silencing and histone H3 lysine-9 methylation by RNAi Science Sep 13 2002
V	ŀ	1833-1837 297

Examiner Signature:	Date Considered:
Examine Signature.	Date Considered.

10/709,739

Filing Date First Inventor May 26, 2004 Itzhak Bentwich

Art Unit

1631

Examiner Docket Number CLOW, LORI A 050992.0302.CPUS00

		NON PATENT LITERATURE DOCUMENTS
Examiner		
initials	Cite No#	Authors, Title, Journal, Date, Year, Pages, Volume
1600		BAULCOMBE, D. DNA events. An RNA microcosm Science Sep 20 2002 2002-2003 297
1	1610	LLAVE, C., Z. XIE, K. D. KASSCHAU and J. C. CARRINGTON. Cleavage of Scarecrow-like mRNA targets directed by a class of Arabidopsis miRNA Science Sep 20 2002 2053-2056 297
	1620	MOCHIZUKI, K., N. A. FINE, T. FUJISAWA and M. A. GOROVSKY. Analysis of a piwi-related gene implicates small RNAs in genome rearrangement in tetrahymena Cell Sep 20 2002 689-699 110
	1630	HUTVAGNER, G. and P. D. ZAMORE. A microRNA in a multiple-turnover RNAi enzyme complex Science Sep 20 2002 2056-2060 297
	1640	COBURN, G. A. and B. R. CULLEN. Potent and specific inhibition of human immunodeficiency virus type 1 replication by RNA interference. J Virol. Sep. 2002, 9225-9231, 76
	1650	CAUDY, A. A., M. MYERS, G. J. HANNON and S. M. HAMMOND. Fragile X-related protein and VIG associate with the RNA interference machinery. Genes Dev. Oct 1 2002 2491-2496 16
	1660	ISHIZUKA, A., M. C. SIOMI and H. SIOMI. A Drosophila fragile X protein interacts with components of RNAi and ribosomal proteins. Genes Dev. Oct 1 2002 2497-2508 16
	1670	VOINNET, O. RNA silencing: small RNAs as ubiquitous regulators of gene expression. Curr Opin Plant Biol. Oct. 2002 444-451. 5
	1680	GOLDEN, T. A., S. E. SCHAUER, J. D. LANG, S. PIEN, A. R. MUSHEGIAN, U. GROSSNIKLAUS, D. W. MEINKE and A. RAY. SHORT INTEGUMENTS1/SUSPENSOR1/CARPEL FACTORY, a Dicer homolog, is a maternal effect gene required for embryo development in Arabidopsis Plant Physiol Oct 2002 808-822 130
	1690	MERKLE, I., M. J. VAN OOIJ, F. J. VAN KUPPEVELD, D. H. GLAUDEMANS, J. M. GALAMA, A. HENKE, R. ZELL and W. J. MELCHERS. Biological significance of a human enterovirus B-specific RNA element in the 3' nontranslated region J Virol Oct 2002 9900-9909 76
	1700	FROEYEN, M. and P. HERDEWIJN. RNA as a target for drug design, the example of Tat-TAR interaction. Curr Top Med Chem. Oct. 2002, 1123-1145, 2
	1710	CARMELL, M. A., Z. XUAN, M. Q. ZHANG and G. J. HANNON. The Argonaute family: tentacles that reach into RNAi, developmental control, stem cell maintenance, and tumorigenesis. Genes Dev. Nov 1 2002 2733-2742 16
	1720	PROVOST, P., D. DISHART, J. DOUCET, D. FRENDEWEY, B. SAMUELSSON and O. RADMARK. Ribonuclease activity and RNA binding of recombinant human Dicer Embo J Nov 1 2002 5864-5874 21
	1730	ZHANG, H., F. A. KOLB, V. BRONDANI, E. BILLY and W. FILIPOWICZ. Human Dicer preferentially cleaves dsRNAs at their termini without a requirement for ATP Embo J Nov 1 2002 5875-5885 21
	1740	MALLORY, A. C., B. J. REINHART, D. BARTEL, V. B. VANCE and L. H. BOWMAN. A viral suppressor of RNA silencing differentially regulates the accumulation of short interfering RNAs and micro-RNAs in tobacco Proc Natl Acad Sci U S A Nov 12 2002 15228-15233 99
	1750	GOTTESMAN, S. Stealth regulation: biological circuits with small RNA switches Genes Dev Nov 15 2002 2829-2842 16
	1760	CALIN, G. A., C. D. DUMITRU, M. SHIMIZU, R. BICHI, S. ZUPO, E. NOCH, H. ALDLER, S. RATTAN, M. KEATING, K. RAI, L. RASSENTI, T. KIPPS, M. NEGRINI, F. BULLRICH and C. M. CROCE. Frequent deletions and down-regulation of micro- RNA genes miR15 and miR16 at 13q14 in chronic lymphocytic leukemia Proc Natl Acad Sci U S A Nov 26 2002 15524-15529 99
V	1770	GAUDILLIERE, B., Y. SHI and A. BONNI. RNA interference reveals a requirement for myocyte enhancer factor 2A in activity-dependent neuronal survival J Biol Chem Nov 29 2002 46442-46446 277

Examiner Signature:	Date Considered:	

10/709,739 May 26, 2004 Itzhak Bentwich

Filing Date First Inventor

1631

Art Unit Examiner Docket Number

CLOW, LORI A 050992.0302.CPUS00

		NON PATENT LITERATURE DOCUMENTS
Examlı	1	
Initia		
-	1780	JONES, L. Revealing micro-RNAs in plants Trends Plant Sci Nov 2002 473-475 7
	1790	SCHAUER, S. E., S. E. JACOBSEN, D. W. MEINKE and A. RAY. DICER-LIKE1: blind men and
	1000	elephants in Arabidopsis development Trends Plant Sci Nov 2002 487-491 7 OKAZAKI, Y., M. FURUNO, T. KASUKAWA, J. ADACHI, H. BONO, S. KONDO, et al. Analysis of the
	1800	
İ		mouse transcriptome based on functional annotation of 60,770 full-length cDNAs Nature Dec 5 2002 563-573 420
-	1810	DENNIS, C. Small RNAs: the genome's guiding hand? Nature Dec 19-26 2002 732 420
	1820	UCHIDA, N., S. HOSHINO, H. IMATAKA, N. SONENBERG and T. KATADA. A novel role of the
	1020	
ļ	ļ	mammalian GSPT/eRF3 associating with poly(A)-binding protein in Cap/Poly(A)-dependent translation
	1830	J Biol Chem Dec 27 2002 50286-50292 277 HUTTENHOFER, A., J. BROSIUS and J. P. BACHELLERIE. RNomics: identification and function of
	1630	small, non-messenger RNAs Curr Opin Chem Biol Dec 2002 835-843 6
-	1840	WOOD, N. T. Unravelling the molecular basis of viral suppression of PTGS Trends Plant Sci 2002
	1040	384 7
	1850	COHEN, O., C. ERB, D. GINZBERG, Y. POLLAK, S. SEIDMAN, S. SHOHAM, R. YIRMIYA and H.
		SOREQ. Neuronal overexpression of "readthrough" acetylcholinesterase is associated with antisense-
		suppressible behavioral impairments Mol Psychiatry ***No date in pubmed*** 2002 874-885 7
	1860	MLOTSHWA, S., O. VOINNET, M. F. METTE, M. MATZKE, H. VAUCHERET, S. W. DING, G. PRUSS
l {		and V. B. VANCE. RNA silencing and the mobile silencing signal Plant Cell ***No date in pubmed*** In
		2002 S289-301 14 Suppl
	1870	TANG, G., B. J. REINHART, D. P. BARTEL and P. D. ZAMORE. A biochemical framework for RNA
		silencing in plants Genes Dev Jan 1 2003 49-63 17
1	1880	KAWASAKI, H. and K. TAIRA. Short hairpin type of dsRNAs that are controlled by tRNA(Val) promoter
!	ŀ	significantly induce RNAi-mediated gene silencing in the cytoplasm of human cells Nucleic Acids Res
		Jan 15 2003 700-707 31
]	1890	ASHRAFI, K., F. Y. CHANG, J. L. WATTS, A. G. FRASER, R. S. KAMATH, J. AHRINGER and G.
		RUVKUN. Genome-wide RNAi analysis of Caenorhabditis elegans fat regulatory genes Nature Jan 16
		2003 268-272 421
1	1900	KAMATH, R. S., A. G. FRASER, Y. DONG, G. POULIN, R. DURBIN, M. GOTTA, A. KANAPIN, N. LE
1		BOT, S. MORENO, M. SOHRMANN, D. P. WELCHMAN, P. ZIPPERLEN and J. AHRINGER.
	· ·	Systematic functional analysis of the Caenorhabditis elegans genome using RNAi Nature Jan 16
	1010	2003 231-237 421
	1910	TUSCHL, T. Functional genomics: RNA sets the standard Nature Jan 16 2003 220-221 421 IYER, L. M., E. V. KOONIN and L. ARAVIND. Evolutionary connection between the catalytic subunits of
	1920	DNA-dependent RNA polymerases and eukaryotic RNA-dependent RNA polymerases and the origin of
		RNA polymerases BMC Struct Biol Jan 28 2003 1 3
+	1930	SHI, Y. Mammalian RNAi for the masses Trends Genet Jan 2003 9-12 19
 	1940	CERUTTI, H. RNA interference: traveling in the cell and gaining functions? Trends Genet Jan 2003
		39-46 19
 -	1950	ZENG, Y. and B. R. CULLEN. Sequence requirements for micro RNA processing and function in
		human cells Rna Jan 2003 112-123 9
		KAWASAKI, H., E. SUYAMA, M. IYO and K. TAIRA. siRNAs generated by recombinant human Dicer
		induce specific and significant but target site-independent gene silencing in human cells Nucleic Acids
		Res Feb 1 2003 981-987 31
J	1970	REINER, A., D. YEKUTIELI and Y. BENJAMINI. Identifying differentially expressed genes using false
		discovery rate controlling procedures Bioinformatics Feb 12 2003 368-375 19

Examiner Signature:	Date Considered:
Examiner Signature:	Date Considered:

10/709,739 May 26, 2004

Filing Date First Inventor

Itzhak Bentwich

Art Unit Examiner 1631

Docket Number

CLOW, LORI A 050992.0302.CPUS00

		NON PATENT LITERATURE DOCUMENTS
Examiner	O14 - N - #	Authors Title Journal Date Veer Bores Volume
Initials	Cite No#	Authors, Title, Journal, Date, Year, Pages, Volume
	1980	DOENCH, J. G., C. P. PETERSEN and P. A. SHARP. siRNAs can function as miRNAs. Genes Dev
		Feb 15 2003 438-442 17
}	1990	GUPTA, V., A. CHERKASSKY, P. CHATIS, R. JOSEPH, A. L. JOHNSON, J. BROADBENT, T.
t l		ERICKSON and J. DIMEO. Directly labeled mRNA produces highly precise and unbiased differential
		gene expression data Nucleic Acids Res Feb 15 2003 e13 31
	2000	BOFFELLI, D., J. MCAULIFFE, D. OVCHARENKO, K. D. LEWIS, I. OVCHARENKO, L. PACHTER and
l		E. M. RUBIN. Phylogenetic shadowing of primate sequences to find functional regions of the human
		genome Science Feb 28 2003 1391-1394 299
	2010	KASSCHAU, K. D., Z. XIE, E. ALLEN, C. LLAVE, E. J. CHAPMAN, K. A. KRIZAN and J. C.
1 1		CARRINGTON. P1/HC-Pro, a viral suppressor of RNA silencing, interferes with Arabidopsis
4		development and miRNA unction Dev Cell Feb 2003 205-217 4
	2020	CARMELL, M. A., L. ZHANG, D. S. CONKLIN, G. J. HANNON and T. A. ROSENQUIST. Germline
1		transmission of RNAi in mice Nat Struct Biol Feb 2003_91-92_10
	2030	DOSTIE, J., Z. MOURELATOS, M. YANG, A. SHARMA and G. DREYFUSS. Numerous microRNPs in
l l		neuronal cells containing novel microRNAs Rna Feb 2003 180-186 9
	2040	LAGOS-QUINTANA, M., R. RAUHUT, J. MEYER, A. BORKHARDT and T. TUSCHL. New microRNAs
ļ	20.0	from mouse and human Rna Feb 2003 175-179 9
	2050	WILSON, J. A., S. JAYASENA, A. KHVOROVA, S. SABATINOS, I. G. RODRIGUE-GERVAIS, S. ARYA
1	2000	F. SARANGI, M. HARRIS-BRANDTS, S. BEAULIEU and C. D. RICHARDSON. RNA interference
l l		blocks gene expression and RNA synthesis from hepatitis C replicons propagated in human liver cells
1		Proc Natl Acad Sci U S A Mar 4 2003 2783-2788 100
	2060	LIM, L. P., M. E. GLASNER, S. YEKTA, C. B. BURGE and D. P. BARTEL. Vertebrate microRNA genes
1	2060	
	0070	Science Mar 7 2003 1540 299 MANIATAKI, E., A. E. MARTINEZ DE ALBA, R. SAGESSER, M. TABLER and M. TSAGRIS. Viroid
	2070	
		RNA systemic spread may depend on the interaction of a 71-nucleotide bulged hairpin with the host
	2222	protein VirP1 Rna Mar 2003 346-354 9
	2080	AMBROS, V., B. BARTEL, D. P. BARTEL, C. B. BURGE, J. C. CARRINGTON, X. CHEN, G.
		DREYFUSS, S. R. EDDY, S. GRIFFITHS-JONES, M. MARSHALL, M. MATZKE, G. RUVKUN and T.
		TUSCHL. A uniform system for microRNA annotation Rna Mar 2003 277-279 9
į į	2090	FINDLEY, S. D., M. TAMANAHA, N. J. CLEGG and H. RUOHOLA-BAKER. Maelstrom, a Drosophila
ľ		spindle-class gene, encodes a protein that colocalizes with Vasa and RDE1/AGO1 homolog, Aubergine
		in nuage Development Mar 2003 859-871 130
1	2100	HERSHBERG, R., S. ALTUVIA and H. MARGALIT. A survey of small RNA-encoding genes in
		Escherichia coli Nucleic Acids Res Apr 1 2003 1813-1820 31
	2110	ZHOU, A., S. SCOGGIN, R. B. GAYNOR and N. S. WILLIAMS. Identification of NF-kappa B-regulated
1		genes induced by TNFalpha utilizing expression profiling and RNA interference Oncogene Apr 3
1		2003 2054-2064 22
	2120	BRENNECKE, J., D. R. HIPFNER, A. STARK, R. B. RUSSELL and S. M. COHEN. bantam encodes a
1		developmentally regulated microRNA that controls cell proliferation and regulates the proapoptotic gene
1		hid in Drosophila Cell Apr 4 2003 25-36 113
	2130	LIM, L. P., N. C. LAU, E. G. WEINSTEIN, A. ABDELHAKIM, S. YEKTA, M. W. RHOADES, C. B.
1		BURGE and D. P. BARTEL. The microRNAs of Caenorhabditis elegans. Genes Dev. Apr 15 2003
- I		991-1008 17
	2140	XU, P., S. Y. VERNOOY, M. GUO and B. A. HAY. The Drosophila microRNA Mir-14 suppresses cell
1		death and is required for normal fat metabolism Curr Biol Apr 29 2003 790-795 13
	2150	XIE, Z., K. D. KASSCHAU and J. C. CARRINGTON. Negative feedback regulation of Dicer-Like1 in
U		Arabidopsis by microRNA-guided mRNA degradation Curr Biol Apr 29 2003 784-789 13

Examiner Signature:	Date Considered:	
cranner soname	Date Considered.	

10/709,739 May 26, 2004 Itzhak Bentwich

Filing Date First Inventor

1631

Art Unit Examiner

CLOW, LORI A

Docket Number

050992.0302.CPUS00

		NON PATENT LITERATURE DOCUMENTS
Examiner		
initiais	Cite No#	Authors, Title, Journal, Date, Year, Pages, Volume
	2160	MASSE, E., N. MAJDALANI and S. GOTTESMAN. Regulatory roles for small RNAs in bacteria Curr
		Opin Microbiol Apr 2003 120-124 6
	2170	CARMICHAEL, G. G. Antisense starts making more sense Nat Biotechnol Apr 2003 371-372 21
	2180	YELIN, R., D. DAHARY, R. SOREK, E. Y. LEVANON, O. GOLDSTEIN, A. SHOSHAN, A. DIBER, S.
1 1		BITON, Y. TAMIR, R. KHOSRAVI, S. NEMZER, E. PINNER, S. WALACH, J. BERNSTEIN, K.
		SAVITSKY and G. ROTMAN. Widespread occurrence of antisense transcription in the human genome
\		Nat Biotechnol Apr 2003 379-386 21
	2190	BOUTET, S., F. VAZQUEZ, J. LIU, C. BECLIN, M. FAGARD, A. GRATIAS, J. B. MOREL, P. CRETE,
		X. CHEN and H. VAUCHERET. Arabidopsis HEN1: a genetic link between endogenous miRNA
1		controlling development and siRNA controlling transgene silencing and virus resistance Curr Biol May
		13 2003 843-848 13
	2200	AMBROS, V., R. C. LEE, A. LAVANWAY, P. T. WILLIAMS and D. JEWELL. MicroRNAs and other tiny
		endogenous RNAs in C. elegans Curr Biol May 13 2003 807-818 13
	2210	LIANG, X. S., J. Q. LIAN, Y. X. ZHOU, Q. H. NIE and C. Q. HAO. A small yeast RNA inhibits HCV IRES
1		mediated translation and inhibits replication of poliovirus in vivo World J Gastroenterol May 2003
		1008-1013 9
	2220	GRAD, Y., J. AACH, G. D. HAYES, B. J. REINHART, G. M. CHURCH, G. RUVKUN and J. KIM.
		Computational and experimental identification of C. elegans microRNAs Mol Cell May 2003 1253-
\ \		1263 11
	2230	ABRAHANTE, J. E., A. L. DAUL, M. LI, M. L. VOLK, J. M. TENNESSEN, E. A. MILLER and A. E.
j		ROUGVIE. The Caenorhabditis elegans hunchback-like gene lin-57/hbl-1 controls developmental time
l		and is regulated by microRNAs Dev Cell May 2003 625-637 4
	2240	LIN, S. Y., S. M. JOHNSON, M. ABRAHAM, M. C. VELLA, A. PASQUINELLI, C. GAMBERI, E.
		GOTTLIEB and F. J. SLACK. The C elegans hunchback homolog, hbl-1, controls temporal patterning
		and is a probable microRNA target Dev Cell May 2003 639-650 4
	2250	ZAMVIL, S. S. and L. STEINMAN. Diverse targets for intervention during inflammatory and
		neurodegenerative phases of multiple sclerosis Neuron Jun 5 2003 685-688 38
	2260	AMBROS, V. MicroRNA pathways in flies and worms: growth, death, fat, stress, and timing Cell Jun 13
		2003 673-676 113
	2270	MOSS, E. G. and L. TANG. Conservation of the heterochronic regulator Lin-28, its developmental
		expression and microRNA complementary sites Dev Biol Jun 15 2003 432-442 258
	2280	SMALHEISER, N. R. EST analyses predict the existence of a population of chimeric microRNA
		precursor-mRNA transcripts expressed in normal human and mouse tissues. Genome Biol. Epub 2003
		Jun 18 2003 403 4
	2290	KAWASAKI, H. and K. TAIRA. Hes1 is a target of microRNA-23 during retinoic-acid-induced neuronal
		differentiation of NT2 cells Nature Jun 19 2003 838-842 423
	2300	LAI, E. C., P. TOMANCAK, R. W. WILLIAMS and G. M. RUBIN. Computational identification of
		Drosophila microRNA genes Genome Biol Epub 2003 Jun 30 2003 R42 4
	2310	No author listed. Whither RNAi? Nat Cell Biol Jun 2003 489-490 5
	2320	BARTEL, B. and D. P. BARTEL. MicroRNAs: at the root of plant development? Plant Physiol Jun
		2003 709-717 132
	2330	DYKXHOORN, D. M., C. D. NOVINA and P. A. SHARP. Killing the messenger: short RNAs that silence
	95:5	gene expression Nat Rev Mol Cell Biol Jun 2003 457-467 4
	2340	SAUNDERS, L. R. and G. N. BARBER. The dsRNA binding protein family: critical roles, diverse cellular
		functions Faseb J Jun 2003 961-983 17
47	2350	STEINMAN, L. and S. ZAMVIL. Transcriptional analysis of targets in multiple sclerosis Nat Rev
		Immunol Jun 2003 483-492 3

Examiner Signature:	Date Considered:

10/709,739 May 26, 2004

Filing Date First Inventor

Itzhak Bentwich

Art Unit

1631

Examiner Docket Number CLOW, LORI A 050992.0302.CPUS00

•		information disclosure Statement
	-	NON PATENT LITERATURE DOCUMENTS
Examiner		
Initials	Cite No#	Authors, Title, Journai, Date, Year, Pages, Volume
	2360	QI, Y. and B. DING. Inhibition of cell growth and shoot development by a specific nucleotide sequence
(in a noncoding viroid RNA Plant Cell Jun 2003 1360-1374 15
	2370	JACKSON, A. L., S. R. BARTZ, J. SCHELTER, S. V. KOBAYASHI, J. BURCHARD, M. MAO, B. LI, G.
1		CAVET and P. S. LINSLEY. Expression profiling reveals off-target gene regulation by RNAi Nat
1		Biotechnol Jun 2003 635-637 21
	2380	BASHIRULLAH, A., A. E. PASQUINELLI, A. A. KIGER, N. PERRIMON, G. RUVKUN and C. S.
\ \		THUMMEL. Coordinate regulation of small temporal RNAs at the onset of Drosophila metamorphosis
1		Dev Biol Jul 1 2003 1-8 259
	2390	SEMPERE, L. F., N. S. SOKOL, E. B. DUBROVSKY, E. M. BERGER and V. AMBROS. Temporal
1		regulation of microRNA expression in Drosophila melanogaster mediated by hormonal signals and
1		broad-Complex gene activity Dev Biol Jul 1 2003 9-18 259
	2400	HEETEBRIJ, R. J., E. G. TÁLMAN, M. A. V VELZEN, R. P. VAN GIJLSWIJK, S. S. SNOEIJERS, M.
1		SCHALK, J. WIEGANT, F. V D RIJKE, R. M. KERKHOVEN, A. K. RAAP, H. J. TANKE, J. REEDIJK and
		H. J. HOUTHOFF. Platinum(II)-based coordination compounds as nucleic acid labeling reagents:
1		synthesis, reactivity, and applications in hybridization assays Chembiochem Jul 7 2003 573-583 4
	2410	BORODINA, T. A., H. LEHRACH and A. V. SOLDATOV. Ligation-based synthesis of oligonucleotides
İ		with block structure Anal Biochem Jul 15 2003 309-313 318
	2420	JOHNSON, S. M., S. Y. LIN and F. J. SLACK. The time of appearance of the C. elegans let-7
\		microRNA is transcriptionally controlled utilizing a temporal regulatory element in its promoter Dev Biol
l		Jul 15 2003 364-379 259
	2430	CARRINGTON, J. C. and V. AMBROS. Role of microRNAs in plant and animal development Science
		Jul 18 2003 336-338 301
	2440	SMALE, S. T. The establishment and maintenance of lymphocyte identity through gene silencing Nat
		Immunol Jul 2003 607-615 4
	2450	BRIDGE, A. J., S. PEBERNARD, A. DUCRAUX, A. L. NICOULAZ and R. IGGO. Induction of an
		interferon response by RNAi vectors in mammalian cells Nat Genet Jul 2003 263-264 34
i i	2460	SEITZ, H., N. YOUNGSON, S. P. LIN, S. DALBERT, M. PAULSEN, J. P. BACHELLERIE, A. C.
		FERGUSON-SMITH and J. CAVAILLE. Imprinted microRNA genes transcribed antisense to a
		reciprocally imprinted retrotransposon-like gene Nat Genet Jul 2003 261-262 34
	2470	ZENG, Y., R. YI and B. R. CULLEN. MicroRNAs and small interfering RNAs can inhibit mRNA
		expression by similar mechanisms Proc Natl Acad Sci U S A Aug 19 2003 9779-9784 100
1	2480	SCHRAMKE, V. and R. ALLSHIRE. Hairpin RNAs and retrotransposon LTRs effect RNAi and
		chromatin-based gene silencing Science Aug 22 2003 1069-1074 301
	2490	WIZNEROWICZ, M. and D. TRONO. Conditional suppression of cellular genes: lentivirus vector-
		mediated drug-inducible RNA interference J Virol Aug 2003 8957-8961 77
	2500	LAU, N. C. and D. P. BARTEL. Censors of the genome Sci Am Aug 2003 34-41 289
	2510	HOUBAVIY, H. B., M. F. MURRAY and P. A. SHARP. Embryonic stem cell-specific MicroRNAs Dev
	0555	Cell Aug 2003 351-358 5
	2520	ARAVIN, A. A., M. LAGOS-QUINTANA, A. YALCIN, M. ZAVOLAN, D. MARKS, B. SNYDER, T.
		GAASTERLAND, J. MEYER and T. TUSCHL. The small RNA profile during Drosophila melanogaster
	0500	development Dev Cell Aug 2003 337-350 5
	2530	MCMANUS, M. T. MicroRNAs and cancer Semin Cancer Biol Aug 2003 253-258 13
1	2540	BANER, J., A. ISAKSSON, E. WALDENSTROM, J. JARVIUS, U. LANDEGREN and M. NILSSON.
ツ		Parallel gene analysis with allele-specific padlock probes and tag microarrays Nucleic Acids Res Sep
	t	2003 e103 31

Examiner Signature:	Date Considered:
Examiner Signature.	Date Considered.

10/709,739 May 26, 2004 Itzhak Bentwich

Filing Date First Inventor

Art Unit

1631

Examiner Docket Number CLOW, LORI A 050992.0302.CPUS00

		NON PATENT LITERATURE DOCUMENTS
Examiner		
Initials	Cite No#	Authors, Title, Journal, Date, Year, Pages, Volume
	2550	BOUTLA, A., C. DELIDAKIS and M. TABLER. Developmental defects by antisense-mediated
,		inactivation of micro-RNAs 2 and 13 in Drosophila and the identification of putative target genes Nucleic
		Acids Res Sep 1 2003 4973-4980 31
	2560	PALATNIK, J. F., E. ALLEN, X. WU, C. SCHOMMER, R. SCHWAB, J. C. CARRINGTON and D.
1		WEIGEL. Control of leaf morphogenesis by microRNAs Nature Sep 18 2003 257-263 425
	2570	KLEIN, R. J. and S. R. EDDY. RSEARCH: finding homologs of single structured RNA sequences BMC
1		Bioinformatics Sep 22 2003 44 4
	2580	CAUDY, A. A., R. F. KETTING, S. M. HAMMOND, A. M. DENLI, A. M. BATHOORN, B. B. TOPS, J. M.
1		SILVA, M. M. MYERS, G. J. HANNON and R. H. PLASTERK. A micrococcal nuclease homologue in
		RNAi effector complexes Nature Sep 25 2003 411-414 425
	2590	LEE, Y., C. AHN, J. HAN, H. CHOI, J. KIM, J. YIM, J. LEE, P. PROVOST, O. RADMARK, S. KIM and V.
		N. KIM. The nuclear RNase III Drosha initiates microRNA processing Nature Sep 25 2003 415-419
l 1		425
	2600	SLEDZ, C. A., M. HOLKO, M. J. DE VEER, R. H. SILVERMAN and B. R. WILLIAMS. Activation of the
	2000	interferon system by short-interfering RNAs Nat Cell Biol Sep 2003 834-839 5
	2610	BERGMANN, A. and M. E. LANE. HIDden targets of microRNAs for growth control Trends Biochem
	2010	Sci Sep 2003 461-463 28
	2620	KHVOROVA, A., A. REYNOLDS and S. D. JAYASENA. Functional siRNAs and miRNAs exhibit strand
	2020	bias Cell Oct 17 2003 209-216 115
	2630	SCHWARZ, D. S., G. HUTVAGNER, T. DU, Z. XU, N. ARONIN and P. D. ZAMORE. Asymmetry in the
	2030	assembly of the RNAi enzyme complex Cell Oct 17 2003 199-208 115
	2640	ABBOTT, A. L. Heterochronic genes Curr Biol Oct 28 2003 R824-825 13
		HAKE, S. MicroRNAs: a role in plant development Curr Biol Oct 28 2003 R851-852 13
	2650	CARTHEW, R. W. Making and breaking with nucleases and small RNAs Nat Struct Biol Oct 2003
j	2660	
	0070	776-777 10 KRICHEVSKY, A. M., K. S. KING, C. P. DONAHUE, K. KHRAPKO and K. S. KOSIK. A microRNA array
į.	2670	
]		reveals extensive regulation of microRNAs during brain development Rna Oct 2003 1274-1281 9
	0000	MATTICK, J. S. Challenging the dogma: the hidden layer of non-protein-coding RNAs in complex
	2680	
	0000	organisms Bioessays Oct 2003 930-939 25 NELSON, P., M. KIRIAKIDOU, A. SHARMA, E. MANIATAKI and Z. MOURELATOS. The microRNA
	2690	
	0700	world: small is mighty Trends Biochem Sci Oct 2003 534-540 28
l l	2700	MICHAEL, M. Z., O. C. SM, N. G. VAN HOLST PELLEKAAN, G. P. YOUNG and R. J. JAMES.
\		Reduced accumulation of specific microRNAs in colorectal neoplasia Mol Cancer Res Oct 2003 882-
	0710	891 1
	2710	ALLINSON, T. M., E. T. PARKIN, A. J. TURNER and N. M. HOOPER. ADAMs family members as
		amyloid precursor protein alpha-secretases J Neurosci Res Nov 1 2003 342-352 74
	2720	KAWASAKI, H. and K. TAIRA. Retraction: Hes1 is a target of microRNA-23 during retinoic-acid-induced
		neuronal differentiation of NT2 cells Nature Nov 6 2003 100 426
	2730	SAXENA, S., Z. O. JONSSON and A. DUTTA. Small RNAs with imperfect match to endogenous mRNA
1		repress translation. Implications for off-target activity of small inhibitory RNA in mammalian cells J Biol
		Chem Nov 7 2003 44312-44319 278
1	2740	BASYUK, E., F. SUAVET, A. DOGLIO, R. BORDONNE and E. BERTRAND. Human let-7 stem-loop
1	1	precursors harbor features of RNase III cleavage products Nucleic Acids Res Nov 15 2003 6593-
1.71		6597 31
	2750	STEVENSON, M. Dissecting HIV-1 through RNA interference Nat Rev Immunol Nov 2003 851-858
/1/		3

Examiner Signature:	Date Considered:	

10/709,739 May 26, 2004

Filing Date First Inventor

Itzhak Bentwich

Art Unit Examiner 1631

Docket Number

CLOW, LORI A 050992.0302.CPUS00

		NON PATENT LITERATURE DOCUMENTS
Examiner		
Initials	Cite No#	Authors, Title, Journal, Date, Year, Pages, Volume
	2760	WIENHOLDS, E., M. J. KOUDIJS, F. J. VAN EEDEN, E. CUPPEN and R. H. PLASTERK. The
 }		microRNA-producing enzyme Dicer1 is essential for zebrafish development Nat Genet Nov 2003
		217-218 35
	2770	GIBBS, W. W. The unseen genome: gems among the junk Sci Am Nov 2003 26-33 289
	2780	CHANG, J., P. PROVOST and J. M. TAYLOR. Resistance of human hepatitis delta virus RNAs to dicer
		activity J Virol Nov 2003 11910-11917 77
	2790	WANG, D., A. URISMAN, Y. T. LIU, M. SPRINGER, T. G. KSIAZEK, D. D. ERDMAN, E. R. MARDIS, M.
		HICKENBOTHAM, V. MAGRINI, J. ELDRED, J. P. LATREILLE, R. K. WILSON, D. GANEM and J. L.
		DERISI. Viral discovery and sequence recovery using DNA microarrays PLoS Biol Nov 2003 E2 1
	2800	AUKERMAN, M. J. and H. SAKAI. Regulation of flowering time and floral organ identity by a MicroRNA
		and its APETALA2-like target genes Plant Cell Nov 2003 2730-2741 15
	2810	FINNEGAN, E. J. and M. A. MATZKE. The small RNA world J Cell Sci Dec 1 2003 4689-4693 116
	2820	ENRIGHT, A. J., B. JOHN, U. GAUL, T. TUSCHL, C. SANDER and D. S. MARKS. MicroRNA targets in
		Drosophila Genome Biol Epub 2003 Dec 12 2003 R1 5
	2830	ROSOK, O. and M. SIOUD. Systematic identification of sense-antisense transcripts in mammalian cells
		Nat Biotechnol Jan (Epub 2003 Dec 14) 2004 104-108 22
1	2840	YI, R., Y. QIN, I. G. MACARA and B. R. CULLEN. Exportin-5 mediates the nuclear export of pre-
 	0050	microRNAs and short hairpin RNAs Genes Dev Dec 15 2003 3011-3016 17
1	2850	CAO, X., W. AUFSATZ, D. ZILBERMAN, M. F. METTE, M. S. HUANG, M. MATZKE and S. E.
j		JACOBSEN. Role of the DRM and CMT3 methyltransferases in RNA-directed DNA methylation Curr
	2860	Biol Dec 16 2003 2212-2217 13 YE, K., L. MALININA and D. J. PATEL. Recognition of small interfering RNA by a viral suppressor of
	2000	RNA silencing Nature Dec 18 2003 874-878 426
	2870	JOHNSTON, R. J. and O. HOBERT. A microRNA controlling left/right neuronal asymmetry in
•	20,0	Caenorhabditis elegans Nature Dec 18 2003 845-849 426
	2880	XAYAPHOUMMINE, A., T. BUCHER, F. THALMANN and H. ISAMBERT. Prediction and statistics of
1		pseudoknots in RNA structures using exactly clustered stochastic simulations Proc Natl Acad Sci U S A
į į		Dec 23 2003 15310-15315 100
	2890	LEWIS, B. P., I. H. SHIH, M. W. JONES-RHOADES, D. P. BARTEL and C. B. BURGE. Prediction of
1		mammalian microRNA targets Cell Dec 26 2003 787-798 115
	2900	ROBINSON, W. H., P. J. UTZ and L. STEINMAN. Genomic and proteomic analysis of multiple
		sclerosis. Opinion Curr Opin Immunol Dec 2003 660-667 15
	2910	GIBBS, W. W. The unseen genome: beyond DNA Sci Am Dec 2003 106-113 289
	2920	STARK, A., J. BRENNECKE, R. B. RUSSELL and S. M. COHEN. Identification of Drosophila MicroRNA
		targets PLoS Biol Dec 2003 E60 1
	2930	KONFORTI, B. The news and you Nat Struct Biol 2003 147 10
	2940	STEIN, T. D. and J. A. JOHNSON. Genetic programming by the proteolytic fragments of the amyloid
		precursor protein: somewhere between confusion and clarity Rev Neurosci ***no date in pubmed***
	2050	2003 317-341 14
	2950	SZYMANSKI, M., M. Z. BARCISZEWSKA, M. ZYWICKI and J. BARCISZEWSKI. Noncoding RNA transcripts J Appl Genet "NO DATEIN PUBMED" 2003 1-19 44 ראבו און און און און און און און און און או
	2960	transcripts J Appl Genet NO DATEIN PUBMED 2003 1-19 44 (C) \$ 17-10 7 GRIFFITHS-JONES, S. The microRNA Registry Nucleic Acids Res Jan 1 2004 D109-111 32
	2970	CHEN, C. Z., L. LI, H. F. LODISH and D. P. BARTEL. MicroRNAs modulate hematopoietic lineage
Ψ	[23,0	differentiation Science Jan 2 2004 83-86 303
	L	James Griding Colorido Barri E 2007 00 000

Examiner Signature:	Date Considered:

U.S. Application No. Filing Date First Inventor

10/709,739 May 26, 2004 Itzhak Bentwich

Art Unit

1631

Examiner Docket Number

CLOW, LORI A 050992.0302.CPUS00

		NON PATENT LITERATURE DOCUMENTS
Examiner		
Initials	Cite No#	Authors, Title, Journal, Date, Year, Pages, Volume
	2980	KIM, J., A. KRICHEVSKY, Y. GRAD, G. D. HAYES, K. S. KOSIK, G. M. CHURCH and G. RUVKUN.
1 / 1		Identification of many microRNAs that copurify with polyribosomes in mammalian neurons Proc Natl
		Acad Sci U S A Jan 6 2004 360-365 101
	2990	OHNO, M., E. A. SAMETSKY, L. H. YOUNKIN, H. OAKLEY, S. G. YOUNKIN, M. CITRON, R. VASSAR
1 1 1		and J. F. DISTERHOFT. BACE1 deficiency rescues memory deficits and cholinergic dysfunction in a
		mouse model of Alzheimer's disease Neuron Jan 8 2004 27-33 41
	3000	VELLA, M. C., E. Y. CHOI, S. Y. LIN, K. REINERT and F. J. SLACK. The C. elegans microRNA let-7
1		binds to imperfect let-7 complementary sites from the lin-41 3'UTR Genes Dev Jan 15 2004 132-137
		18
	3010	KAO, S. C., A. M. KRICHEVSKY, K. S. KOSIK and L. H. TSAI. BACE1 suppression by RNA
		interference in primary cortical neurons J Biol Chem Jan 16 2004 1942-1949 279
	3020	HOFACKER, I. L., B. PRIWITZER and P. F. STADLER. Prediction of locally stable RNA secondary
		structures for genome-wide surveys Bioinformatics Jan 22 2004 186-190 20
	3030	RUVKUN, G., B. WIGHTMAN and I. HA. The 20 years it took to recognize the importance of tiny RNAs
		Cell Jan 23 2004 S93-96, 92 p following S96 116
{	3040	BARTEL, D. P. MicroRNAs: genomics, biogenesis, mechanism, and function Cell Jan 23 2004 281-
	2252	297 116
1 1 1	3050	HAN, M. H., S. GOUD, L. SONG and N. FEDOROFF. The Arabidopsis double-stranded RNA-binding
1 1 1		protein HYL1 plays a role in microRNA-mediated gene regulation Proc Natl Acad Sci U S A Jan 27
	0000	2004 1093-1098 101
	3060	HARTIG, J. S., I. GRUNE, S. H. NAJAFI-SHOUSHTARI and M. FAMULOK. Sequence-specific
1 1 1		detection of MicroRNAs by signal-amplifying ribozymes J Am Chem Soc Jan 28 2004 722-723 126
 	3070	NISHITSUJI, H., T. IKEDA, H. MIYOSHI, T. OHASHI, M. KANNAGI and T. MASUDA. Expression of
1 1	3070	small hairpin RNA by lentivirus-based vector confers efficient and stable gene-suppression of HIV-1 on
		human cells including primary non-dividing cells Microbes Infect Jan 2004 76-85 6
		Indifficult delicating printery from dividing delications will be an indicating the control of t
	3080	OTA, T., Y. SUZUKI, T. NISHIKAWA, T. OTSUKI, T. SUGIYAMA, R. IRIE, A., et al. Complete
		sequencing and characterization of 21,243 full-length human cDNAs Nat Genet Jan 2004 40-45 36
	3090	COLCIAGHI, F., E. MARCELLO, B. BORRONI, M. ZIMMERMANN, C. CALTAGIRONE, F. CATTABENI,
		A. PADOVANI and M. DI LUCA. Platelet APP, ADAM 10 and BACE alterations in the early stages of
	•	Alzheimer disease Neurology Feb 10 2004 498-501 62
	3100	BODEN, D., O. PUSCH, R. SILBERMANN, F. LEE, L. TUCKER and B. RAMRATNAM. Enhanced gene
		silencing of HIV-1 specific siRNA using microRNA designed hairpins Nucleic Acids Res Feb 13 2004
		1154-1158 32
	3110	SEMPERE, L. F., S. FREEMANTLE, I. PITHA-ROWE, E. MOSS, E. DMITROVSKY and V. AMBROS.
		Expression profiling of mammalian microRNAs uncovers a subset of brain-expressed microRNAs with
		possible roles in murine and human neuronal differentiation Genome Biol Epub 2004 Feb 16 2004
		R13 5
	3120	SCACHERI, P. C., O. ROZENBLATT-ROSEN, N. J. CAPLEN, T. G. WOLFSBERG, L. UMAYAM, J. C.
		LEE, C. M. HUGHES, K. S. SHANMUGAM, A. BHATTACHARJEE, M. MEYERSON and F. S. COLLINS.
		Short interfering RNAs can induce unexpected and divergent changes in the levels of untargeted
		proteins in mammalian cells Proc Natl Acad Sci U S A Feb 17 2004 1892-1897 101
	2100	VIE 7 1 K JOHANSEN A M CHSTATSON K D KASSOHALLA DIELLIS D ZUSEDMANIS E
47	3130	XIE, Z., L. K. JOHANSEN, A. M. GUSTAFSON, K. D. KASSCHAU, A. D. LELLIS, D. ZILBERMAN, S. E.
"		JACOBSEN and J. C. CARRINGTON. Genetic and functional diversification of small RNA pathways in plants PLoS Biol May (Epub 2004 Feb 18) 2004 E104 2
<u> </u>	L	Ipianis FLOS Diol May (Epub 2004 Feb 10) 2004 E104 2

Examiner Signature:	Date Considered:	

10/709,739

Filing Date First Inventor

May 26, 2004 Itzhak Bentwich

Art Unit

1631

Examiner Docket Number CLOW, LORI A

050992.0302.CPUS00

		Information Disclosure Statement
		NON PATENT LITERATURE DOCUMENTS
Examiner		
Initials	Cite No#	Authors, Title, Journal, Date, Year, Pages, Volume
(3140	CAWLEY, S., S. BEKIRANOV, H. H. NG, P. KAPRANOV, E. A. SEKINGER, D. KAMPA, A. PICCOLBONI, V. SEMENTCHENKO, J. CHENG, A. J. WILLIAMS, R. WHEELER, B. WONG, J. DRENKOW, M. YAMANAKA, S. PATEL, S. BRUBAKER, H. TAMMANA, G. HELT, K. STRUHL and T. R. GINGERAS. Unbiased mapping of transcription factor binding sites along human chromosomes 21 and 22 points to widespread regulation of noncoding RNAs Cell Feb 20 2004 499-509 116
	3150	DANDEKAR, D. H., K. N. GANESH and D. MITRA. HIV-1 Tat directly binds to NFkappaB enhancer sequence: role in viral and cellular gene expression. Nucleic Acids Res. Feb 23 2004 1270-1278 32
	3160	HUTVAGNER, G., M. J. SIMARD, C. C. MELLO and P. D. ZAMORE. Sequence-specific inhibition of small RNA function PLoS Biol Apr (Epub 2004 Feb 24) 2004 E98 2
	3170	SCHMITTGEN, T. D., J. JIANG, Q. LIU and L. YANG. A high-throughput method to monitor the expression of microRNA precursors Nucleic Acids Res Feb 25 2004 e43 32
	3180	STREMLAU, M., C. M. OWENS, M. J. PERRON, M. KIESSLING, P. AUTISSIER and J. SODROSKI. The cytoplasmic body component TRIM5alpha restricts HIV-1 infection in Old World monkeys Nature Feb 26 2004 848-853 427
	3190	BOHNSACK, M. T., K. CZAPLINSKI and D. GORLICH. Exportin 5 is a RanGTP-dependent dsRNA-binding protein that mediates nuclear export of pre-miRNAs Rna Feb 2004 185-191 10
	3200	DEMIDOV, V. V. and M. D. FRANK-KAMENETSKII. Two sides of the coin: affinity and specificity of nucleic acid interactions. Trends Biochem Sci. Feb. 2004 62-71 29
	3210	MAQUAT, L. E. Nonsense-mediated mRNA decay: splicing, translation and mRNP dynamics Nat Rev Mol Cell Biol Feb 2004 89-99 5
	3220	NIJHOLT, I., N. FARCHI, M. KYE, E. H. SKLAN, S. SHOHAM, B. VERBEURE, D. OWEN, B. HOCHNER, J. SPIESS, H. SOREQ and T. BLANK. Stress-induced alternative splicing of acetylcholinesterase results in enhanced fear memory and long-term potentiation. Mol Psychiatry Feb 2004, 174-183, 9
	3230	SENGUPTA, P. Taking sides in the nervous system with miRNA Nat Neurosci Feb 2004 100-102
	3240	ZERHOUNI, B., J. A. NELSON and K. SAHA. Isolation of CD4-independent primary human immunodeficiency virus type 1 isolates that are syncytium inducing and acutely cytopathic for CD8+ lymphocytes J Virol Feb 2004 1243-1255 78
	3250	JIN, P., D. C. ZARNESCU, S. CEMAN, M. NAKAMOTO, J. MOWREY, T. A. JONGENS, D. L. NELSON, K. MOSES and S. T. WARREN. Biochemical and genetic interaction between the fragile X mental retardation protein and the microRNA pathway Nat Neurosci Feb 2004 113-117 7
	3260	LAI, E. C., C. WIEL and G. M. RUBIN. Complementary miRNA pairs suggest a regulatory role for miRNA:miRNA duplexes Rna Feb 2004 171-175 10
	3270	METZLER, M., M. WILDA, K. BUSCH, S. VIEHMANN and A. BORKHARDT. High expression of precursor microRNA-155/BIC RNA in children with Burkitt lymphoma Genes Chromosomes Cancer Feb 2004 167-169 39
	3280	DOENCH, J. G. and P. A. SHARP. Specificity of microRNA target selection in translational repression Genes Dev Mar 1 2004 504-511 18
→	3290	LIANG, X. S., J. Q. LIAN, Y. X. ZHOU and M. B. WAN. Inhibitor RNA blocks the protein translation mediated by hepatitis C virus internal ribosome entry site in vivo. World J Gastroenterol. Mar 1 2004 664-667. 10

Examiner Signature:	Date Considered:

U.S. Application No. Filling Date

10/709,739 May 26, 2004

Itzhak Bentwich

First Inventor Art Unit

1631

Examiner Docket Number CLOW, LORI A 050992.0302.CPUS00

l		NON PATENT LITERATURE DOCUMENTS
Examine		
Initials	Cite No#	Authors, Title, Journal, Date, Year, Pages, Volume
	3300	CALIN, G. A., C. SEVIGNANI, C. D. DUMITRU, T. HYSLOP, E. NOCH, S. YENDAMURI, M. SHIMIZU,
<i> </i>		S. RATTAN, F. BULLRICH, M. NEGRINI and C. M. CROCE. Human microRNA genes are frequently
 		located at fragile sites and genomic regions involved in cancers Proc Natl Acad Sci U S A Mar 2
		2004 2999-3004 101
1 1	3310	JUAREZ, M. T., J. S. KUI, J. THOMAS, B. A. HELLER and M. C. TIMMERMANS. microRNA-mediated
		repression of rolled leaf1 specifies maize leaf polarity Nature Mar 4 2004 84-88 428
	3320	KIDNER, C. A. and R. A. MARTIENSSEN. Spatially restricted microRNA directs leaf polarity through
		ARGONAUTE1 Nature Mar 4 2004 81-84 428
	3330	ZAMORE, P. D. Plant RNAi: How a viral silencing suppressor inactivates siRNA Curr Biol Mar 9
		2004 R198-200 14
	3340	WANG, J. F., H. ZHOU, Y. Q. CHEN, Q. J. LUO and L. H. QU. Identification of 20 microRNAs from
		Oryza sativa Nucleic Acids Res Mar 12 2004 1688-1695 32
	3350	JACK, T. Molecular and genetic mechanisms of floral control Plant Cell Epub 2004 Mar 12 2004 S1
		17 16 Suppl
	3360	ROTH, M. E., L. FENG, K. J. MCCONNELL, P. J. SCHAFFER, C. E. GUERRA, J. P. AFFOURTIT, K. R.
		PIPER, L. GUCCIONE, J. HARIHARAN, M. J. FORD, S. W. POWELL, H. KRISHNASWAMY, J. LANE,
ļ .		L. GUCCIONE, G. INTRIERI, J. S. MERKEL, C. PERBOST, A. VALERIO, B. ZOLLA, C. D. GRAHAM, J.
1		HNATH, C. MICHAELSON, R. WANG, B. YING, C. HALLING, C. E. PARMAN, D. RAHA, B. ORR, B.
1 (JEDRZKIEWICZ, J. LIAO, A. TEVELEV, M. J. MATTESSICH, D. M. KRANZ, M. LACEY, J. C.
1		KAUFMAN, J. KIM, D. R. LATIMER and P. M. LIZARDI. Expression profiling using a hexamer-based
		universal microarray Nat Biotechnol Apr (Epub 2004 Mar 14) 2004: 418-426 22
1		
	3370	RAJEWSKY, N. and N. D. SOCCI. Computational identification of microRNA targets Dev Biol Mar 15
		2004 529-535 267
	3380	WINKLER, W. C., A. NAHVI, A. ROTH, J. A. COLLINS and R. R. BREAKER. Control of gene
		expression by a natural metabolite-responsive ribozyme Nature Mar 18 2004 281-286 428
	3390	KUWABARA, T., J. HSIEH, K. NAKASHIMA, K. TAIRA and F. H. GAGE. A small modulatory dsRNA
		specifies the fate of adult neural stem cells Cell Mar 19 2004 779-793 116
	3400	CHEN, X. A microRNA as a translational repressor of APETALA2 in Arabidopsis flower development
		Science Mar 26 2004 2022-2025 303
	3410	CARMELL, M. A. and G. J. HANNON. RNase III enzymes and the initiation of gene silencing Nat Struct
		Mol Biol Mar 2004 214-218 11
	3420	DAVIDSON, B. L. and H. L. PAULSON. Molecular medicine for the brain: silencing of disease genes
<u> </u>		with RNA interference Lancet Neurol Mar 2004 145-149 3
	3430	KAWASAKI, H., R. WADHWA and K. TAIRA. World of small RNAs: from ribozymes to siRNA and
		miRNA Differentiation Mar 2004 58-64 72
	3440	MEISTER, G., M. LANDTHALER, Y. DORSETT and T. TUSCHL. Sequence-specific inhibition of
		microRNA- and siRNA-induced RNA silencing Rna Mar 2004 544-550 10
	3450	NELSON, P. T., A. G. HATZIGEORGIOU and Z. MOURELATOS. miRNP:mRNA association in
		polyribosomes in a human neuronal cell line Rna Mar 2004 387-394 10
	3460	FLOYD, S. K. and J. L. BOWMAN. Gene regulation: ancient microRNA target sequences in plants
		Nature Apr 1 2004 485-486 428
	3470	LEE, Y. S., K. NAKAHARA, J. W. PHAM, K. KIM, Z. HE, E. J. SONTHEIMER and R. W. CARTHEW.
1 1	1	Distinct roles for Drosophila Dicer-1 and Dicer-2 in the siRNA/miRNA silencing pathways Cell Apr 2
		2004 69-81 117
	3480	TIJSTERMAN, M. and R. H. PLASTERK. Dicers at RISC; the mechanism of RNAi Cell Apr 2 2004 1
		3 117

Evaminer Signature:	Date Considered:	

10/709,739

Filing Date First Inventor May 26, 2004 Itzhak Bentwich

Art Unit

1631

Examiner
Docket Number

CLOW, LORI A 050992.0302.CPUS00

Agrobacterium Proc Natl Acad Sci U S A May 4 2004 6852-6857 101 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev May 15 2004 1165-1178 18 3650 VAUCHERET, H., F. VAZQUEZ, P. CRETE and D. P. BARTEL. The action of ARGONAUTE1 in t			information disclosure Statement
Initials Cite No# Authors, Title, Journal, Date, Year, Pages, Volume MACDIARMID, R. RNA Silencing in Productive Virus Infections Annu Rev Phytopathol Apr 12 2 3500 MACDIARMID, R. RNA Silencing in Productive Virus Infections Annu Rev Phytopathol Apr 12 2 3510 CHEN, J., W. X. LI, D. XIE, J. R. PENG and S. W. DING. Viral virulence protein suppresses RNA silencing-mediated defense but upregulates the role of microma in host gene expression Plant Ce May (Epub 2004 Apr 20) 2004 1302-1313 16 3510 YEKTA, S., I. H. SHIH and D. P. BARTEL. MicroRNA-directed cleavage of HOXB8 mRNA Scien Apr 23 2004 994-596 304 3520 LAMONTAGNE, B., R. N. HANNOUSH, M. J. DAMHA and S. ABOU ELELA. Molecular requirem for duplex recognition and cleavage by eukaryotic RNase III: discovery of an RNA-dependent DNA cleavage activity of yeast Rnt1p J Mol Biol Apr 23 2004 401-418 338 3530 BARRICK, J. E., K. A. CORBINO, W. C. WINKLER, A. NAHVI, M. MANDAL, J. COLLINS, M. LEE, A. SCHOLLINS, M. LEE, A. MARTEN, A. MARTEN, A. R. BREAKER. New RNA motifs sugges expanded scope for riboswitches in bacterial genetic control Proc Natl Acad Sci U S A Apr 27 2 6421-6426 101 3540 PEFFER, S., M. ZAVOLAN, F. A. GRASSER, M. CHIEN, J. J. RUSSO, J. JU, B. JOHN, A. J. ENRICHT, D. MARKS, C. SANDER and T. TUSCHL. Identification of virus-encoded microRNAs Science Apr 30 2004 734-736 304 3550 DORSETT, Y. and T. TUSCHL. siRNAs: applications in functional genomics and potential as therapeutics Nat Rev Drug Discov Apr 2004 318-329 3 3560 MALLORY, A. C. and H. VAUCHERET. MicroRNAs: something important between the genes Cu Opin Plant Biol Apr 2004 120-125 7 3570 OGITA, S., H. UEFUJI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for catfetine biosynthesis in coffee plants with potential for construction of decaffeinated varieties Plant Mol Biol Apr 2004 391-941 54 3580 JABRI, E. RISCy business Nat Struct Mol Biol Apr 2004 300 11 3580 NASHARAR, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation Opin			NON PATENT LITERATURE DOCUMENTS
Initials Cite No# Authors, Title, Journal, Date, Year, Pages, Volume 3490 MACDIARMID, R. RNA Silencing in Productive Virus Infections Annu Rev Phytopathol Apr 12 2 3500 GHEN, J., W. X. LI, D. XIE, J. R. PENG and S. W. DING. Viral virulence protein suppresses RNA	Examiner		
3490 MACDIARMID, R. RNA Silencing in Productive Virus Infections Annu Rev Phytopathol Apr 12 2 3500 CHEN, J., W. X. LI, D. XIE, J. R. PENG and S. W. DING. Viral virulence protein suppresses RNA silencing-mediated defense but upregulates the role of microma in host gene expression Plant Ce May (Epub 2004 Apr 20) 2004 1302-1313 16 3510 YEKTA, S., I. H. SHIH and D. P. BARTEL. MicroRNA-directed cleavage of HOXB8 mRNA Scien Apr 23 2004 594-596 304 3520 LMONTAGNE, B., R. N. HANNOUSH, M. J. DAMHA and S. ABOU ELELA. Molecular requiremmed for duplex recognition and cleavage by eukaryotic RNase III: discovery of an RNA-dependent DNA cleavage activity of yeast Rnt1p J Mol Biol Apr 23 2004 401-418 338 3530 BARRICK, J. E., K. A. CORBINO, W. C. WINKLER, A. NAHVI, M. MANDAL, J. COLLINS, M. LEE, ROTH, N. SUDARSANI, J.ONA, J. K. WICKISER and R. R. BREAKER. New RNA motifs sugges expanded scope for riboswitches in bacterial genetic control Proc Natl Acad Sci U S A Apr 27 2 6421-8426 101 3540 PFFFER, S., M. ZAVOLAN, F. A. GRASSER, M. CHIEN, J. J. RUSSO, J. JU, B. JOHN, A. J. ENRICHT, D. MARKS, C. SANDER and T. TUSCHL. Identification of virus-encoded microRNAs Science Apr 30 2004 734-736 304 3550 DORSETT, Y. and T. TUSCHL. siRNAs: applications in functional genomics and potential as therapeutics Nat Rev Drug Discov Apr 2004 318-329 3 3560 MALLORY, A. C. and H. VAUCHERET. MicroRNAs: something important between the genes Cu Opin Plant Biol Apr 2004 120-125 7 3570 OGITA, S., H. UEFUJI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for caffeine biosynthesis in coffee plants with potential for construction of decaffeinated varieties Plant Mol Biol Apr 2004 139-1941 54 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, nencocing RNAs Curr Opin Microbiol Apr 2004 140-144 7 3590 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export Trends Cell In NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cel		Cite No#	Authors, Title, Journal, Date, Year, Pages, Volume
CHEN, J., W. X. LI, D. XIE, J. R. PENG and S. W. DING. Viral virulence protein suppresses RNA silencing-mediated defense but upregulates the role of microma in host gene expression Plant Ce May (Epub 2004 Apr 20) 2004 1302-1313 16 3510 YEKTA, S. I. H. SHIH and D. P. BARTEL. MicroRNA-directed cleavage of HOXB8 mRNA Scien Apr 23 2004 594-596 304 3520 LAMONTAGNE, B., R. N. HANNOUSH, M. J. DAMHA and S. ABOU ELELA. Molecular requiremed for duplex recognition and cleavage by eukaryotic RNase III: discovery of an RNA-dependent DNA cleavage activity of yeast Rnt1p. J Mol Biol. Apr 23 2004 401-418 338 3530 BARRICK, J. E., K. A. CORBINO, W. C. WINKLER, A. NAHVI, M. MANDAL, J. COLLINS, M. LEE, ROTH, N. SUDARSAN, I. JONA, J. K. WICKISER and R. R. BREAKER. New RNA motifs sugges expanded scope for riboswitches in bacterial genetic control. Proc. Natl. Acad. Sci. U. S. A. Apr 27 2 6421-6426 101 3540 PFEFFER, S., M. ZAVOLAN, F. A. GRASSER, M. CHIEN, J. J. RUSSO, J. JU, B. JOHN, A. J. ENRIGHT, D. MARKS, C. SANDER and T. TUSCHL. Identification of virus-encoded microRNAs Science Apr 30 2004 734-736 304 3550 DORSETT, Y. and T. TUSCHL. siRNAs: applications in functional genomics and potential as therapeutics. Nat. Rev. Drug. Discov. Apr. 2004 318-329 3 3560 MALLORY, A. C. and H. VAUCHERET. MicroRNAs: something important between the genes. Cu. Opin Plant Biol. Apr. 2004 120-125. 7 3570 GITA, S., H. UEFUJI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for caffeine biosynthesis in coffee plants with potential for construction of decaffeinated varieties. Plant Mol Biol. Apr. 2004 319-341 54. 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, noncoding RNAs curr. Opin Microbiol. Apr. 2004 310-144. 7 3590 JABRI, E. RISCy business. Nat Struct Mol Biol. Apr. 2004 300. 11 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation of DiA., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and			MACDIARMID B RNA Silencing in Productive Virus Infections Annu Rev Phytopathol Apr 12 2004
silencing-mediated defense but upregulates the role of microma in host gene expression Plant Ce May (Epub 2004 Apr 20) 2004 1302-1313 16 3510 YEKTA, S., I. H. SHIH and D. P. BARTEL. MicroRNA-directed cleavage of HOXB8 mRNA Sciencia Apr 23 2004 594-596 304 3520 LAMONTAGNE, B., R. N. HANNOUSH, M. J. DAMHA and S. ABOU ELELA. Molecular requiremed for duplex recognition and cleavage by eukaryotic RNase III: discovery of an RNA-dependent DNA cleavage activity of yeast Rnt1p. J Mol Biol. Apr 23 2004 401-418 338 3530 BARRICK, J. E., K. A. CORBINO, W. C. WINKLER, A. NAHVI, M. MANDAL, J. COLLINS, M. LEE ROTH, N. SUDARSAN, I. JONA, J. K. WICKISER and R. R. BREAKER. New RNA motifs sugges expanded scope for riboswitches in bacterial genetic control. Proc. Natl. Acad. Sci. U. S. A. Apr 27 2 6421-6426 101 3540 PFEFFER, S., M. ZAVOLAN, F. A. GRASSER, M. CHIEN, J. J. RUSSO, J. JU, B. JOHN, A. J. ENRIGHT, D. MARKS, C. SANDER and T. TUSCHL. Identification of virus-encoded microRNAs Science Apr 30 2004 734-736 304 3550 DORSETT, Y. and T. TUSCHL. siRNAs: applications in functional genomics and potential as therapeutics. Natl. Rev. Drug Discov. Apr 2004 318-329 3 3560 MALLORY, A. C. and H. VAUCHERET. MicroRNAs: something important between the genes. Cu Opin Plant Biol. Apr. 2004 120-125 7 3570 OGITA, S., H. LEFULI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for caffeine biosynthesis in coffee plants with potential for construction of decaffeinated varieties. Plant Mol Biol. Apr. 2004 319-341 54 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, noncoding RNAs Curr Opin Microbiol. Apr. 2004 140-144 7 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export. Trends Cell I. Apr. 2004 156-159 14 3600 JABRI, E. RISCY business. Nat Struct Mol Biol. Apr. 2004 300 11 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation of language in ground complexity of virus RNA replico		0430	I THE CONTRACT OF THE CONTRACT
silencing-mediated defense but upregulates the role of microma in host gene expression Plant Ce May (Epub 2004 Apr 20) 2004 1302-1313 16 3510 YEKTA, S., I. H. SHIH and D. P. BARTEL. MicroRNA-directed cleavage of HOXB8 mRNA Science Apr 23 2004 594-596 304 3520 LAMONTAGNE, B., R. N. HANNOUSH, M. J. DAMHA and S. ABOU ELELA. Molecular requiremmed for duplex recognition and cleavage by eukaryotic RNase III: discovery of an RNA-dependent DNA cleavage activity of yeast Rnt1p J Mol Biol. Apr 23 2004 401-418 338 3530 BARRICK, J. E., K. A. CORBINO, W. C. WINKLER, A. NAHVI, M. MANDAL, J. COLLINS, M. LEE ROTH, N. SUDARSAN, I. JONA, J. K. WICKISER and R. R. BREAKER. New RNA motifs sugges expanded scope for riboswitches in bacterial genetic control. Proc. Natl. Acad. Sci. U. S. A. Apr 27 2 6421-6426 101 3540 PFEFFER, S., M. ZAVOLAN, F. A. GRASSER, M. CHIEN, J. J. RUSSO, J. JU, B. JOHN, A. J. ENRIGHT, D. MARKS, C. SANDER and T. TUSCHL. Identification of virus-encoded microRNAs Science Apr 30 2004 734-736 304 3550 DORSETT, Y. and T. TUSCHL. siRNAs: applications in functional genomics and potential as therapeutics. Natl. Rev. Drug Discov. Apr 2004 318-329 3 3560 MALLORY, A. C. and H. VAUCHERET. MicroRNAs: something important between the genes. Cu Opin Plant Biol. Apr. 2004 120-125 7 3570 OGITA, S., H. LEFULI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for caffeine biosynthesis in coffee plants with potential for construction of decalfeinated varieties. Plant Mol Biol. Apr. 2004 319-341 54 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, noncoding RNAs Curr Opin Microbiol. Apr. 2004 140-144 7 XIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export. Trends Cell In Apr. 2004 156-159 14 3600 JABRI, E. RISCY business. Nat Struct Mol Biol. Apr. 2004 300 11 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation of Oria, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARP		3500	CHEN J. W. X. L. D. XIE. J. B. PENG and S. W. DING. Viral virulence protein suppresses RNA
May (Epub 2004 Apr 20) 2004 1302-1313 16 3510 YEKTA, S., I. H. SHIH and D. P. BARTEL. MicroRNA-directed cleavage of HOXB8 mRNA Scient Apr 23 2004 594-596 304 3520 LAMONTAGNE, B., R. N. HANNOUSH, M. J. DAMHA and S. ABOU ELELA. Molecular requirem for duplex recognition and cleavage by eukaryotic RNase III: discovery of an RNA-dependent DNA cleavage activity of yeast Rnttp J Mol Biol Apr 23 2004 401-418 338 3530 BARRICK, J. E., K. A. CORBINO, W. C. WINKLER, A. NAHVI, M. MANDAL, J. COLLINS, M. LEE. ROTH, N. SUDARSAN, I. JONA, J. K. WICKISER and R. R. BREAKER. New RNA motifs sugges expanded scope for riboswitches in bacterial genetic control Proc Natl Acad Sci U S A Apr 27 2 6421-6426 101 3540 PFEFFER, S., M. ZAVOLAN, F. A. GRASSER, M. CHIEN, J. J. RUSSO, J. JU, B. JOHN, A. J. ENRIGHT, D. MARKS, C. SANDER and T. TUSCHL. Identification of virus-encoded microRNAs Science Apr 30 2004 734-736 304 3550 DORSETT, Y. and T. TUSCHL. siRNAs: applications in functional genomics and potential as therapeutics Nat Rev Drug Discov Apr 2004 318-329 3 3560 MALLORY, A. C. and H. VAUCHERET. MicroRNAs: something important between the genes Cu Opin Plant Biol Apr 2004 120-125 7 3570 OGITA, S., H. UEFUJI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for caffeine biosynthesis in coffee plants with potential for construction of decaffeinated varieties Plant Mol Biol Apr 2004 931-941 54 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, noncoding RNAs Curr Opin Microbiol Apr 2004 130-144 7 3600 JABRI, E. RISCY business Nat Struct Mol Biol Apr 2004 300 11 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation Opin Cell Biol Apr 2004 127-133 16 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation opin cell Biol Apr 2004 127-133 16 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel g	[[0000	Isilencing-mediated defense but unregulates the role of microrna in host gene expression. Plant Cell
3510 YEKTÄ, S., I. H. SHIH and D. P. BARTEL. MicroRNA-directed cleavage of HOXB8 mRNA Science Apr 23 2004 594-596 304 3520 LAMONTAGNE, B., R. N. HANNOUSH, M. J. DAMHA and S. ABOU ELELA. Molecular requirement for duplex recognition and cleavage by eukaryotic RNase III: discovery of an RNA-dependent DNA cleavage activity of yeast Rnt1p J Mol Biol Apr 23 2004 401-418 338 3530 BARRICK, J. E., K. A. CORBINO, W. C. WINKLER, A. NAHVI, M. MANDAL, J. COLLINS, M. LEE. ROTH, N. SUDARSAN, I. JONA, J. K. WICKISER and R. R. BREAKER. New RNA motifs sugges expanded scope for riboswitches in bacterial genetic control Proc Natl Acad Sci U S A Apr 27 2 6421-6426 101 3540 PFEFFER, S., M. ZAVOLAN, F. A. GRASSER, M. CHIEN, J. J. RUSSO, J. JU, B. JOHN, A. J. ENRIGHT, D. MARKS, C. SANDER and T. TUSCHL. Identification of virus-encoded microRNAs Science Apr 30 2004 734-736 304 3550 DORSETT, Y. and T. TUSCHL. SIRNAS: applications in functional genomics and potential as therapeutics Nat Rev Drug Discov Apr 2004 318-329 3 3560 MALLORY, A. C. and H. VAUCHERET. MicroRNAs: something important between the genes Cu Opin Plant Biol Apr 2004 120-125 7 3570 OGITA, S., H. UEFUIJ, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for caffeine biosynthesis in coffee plants with potential for construction of decaffeinated varieties. Plant Mol Biol Apr 2004 331-941 54 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, noncoding RNAs Curr Opin Microbiol Apr 2004 140-144 7 3590 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export Trends Cell I Apr 2004 156-159 14 3600 JABRI, E. RISCy business Nat Struct Mol Biol Apr 2004 300 11 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation Opin Cell Biol Apr 2004 17-133 16 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C13or125, as a target for 13q31-q32 a			
Apr 23 2004 594-596 304 3520 LAMONTAGNE, B., R. N. HANNOUSH, M. J. DAMHA and S. ABOU ELELA. Molecular requiremm for duplex recognition and cleavage by eukaryotic RNase III: discovery of an RNA-dependent DNA cleavage activity of yeast Rnt1p J Mol Biol Apr 23 2004 401-418 338 3530 BARRICK, J. E., K. A. CORBINO, W. C. WINKLER, A. NAHVI, M. MANDAL, J. COLLINS, M. LEE, ROTH, N. SUDARSAN, I. JONA, J. K. WICKISER and R. R. BREAKER. New RNA motifs sugges expanded scope for riboswitches in bacterial genetic control Proc Natl Acad Sci U S A Apr 27 2 6421-6426 101 3540 PFEFFER, S., M. ZAVOLAN, F. A. GRASSER, M. CHIEN, J. J. RUSSO, J. JU, B. JOHN, A. J. ENRIGHT, D. MARKS, C. SANDER and T. TUSCHL. Identification of virus-encoded microRNAs Science Apr 30 2004 734-736 304 3550 DORSETT, Y. and T. TUSCHL. siRNAs: applications in functional genomics and potential as therapeutics Nat Rev Drug Discov Apr 2004 318-329 3 3560 MALLORY, A. C. and H. VAUCHERET. MicroRNAs: something important between the genes Cu Opin Plant Biol Apr 2004 120-125 7 3570 OGITA, S., H. UEFUJI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for catfleine biosynthesis in coffee plants with potential for construction of decaffeinated varieties Plant Mol Biol Apr 2004 931-941 54 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, noncoding RNAs Curr Opin Microbiol Apr 2004 140-144 7 3590 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export Trends Cell I Apr 2004 156-159 14 3600 JABRI, E. RISCy business Nat Struct Mol Biol Apr 2004 300 11 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation Opin Cell Biol Apr 2004 127-133 16 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification malignant lymphoma Cancer Res May 1 2004 3087-3095 64 3620 MARILLONNET, S. A. GIRITCH, M. GILS,		3510	VEKTA S. I.H. SHIH and D. P. RARTEL. MicroRNA-directed cleavage of HOXB8 mRNA. Science
LAMONTAGNE, B., R. N. HANNOUSH, M. J. DAMHA and S. ABOU ELELA. Molecular requirem for duplex recognition and cleavage by eukaryotic RNase III: discovery of an RNA-dependent DNA cleavage activity of yeast Rnt1p J Mol Biol Apr 23 2004 401-418 338 3530 BARRICK, J. E., K. A. CORBINO, W. C. WINKLER, A. NAHVI, M. MANDAL, J. COLLINS, M. LEE, ROTH, N. SUDARSAN, I. JONA, J. K. WICKISER and R. R. BREAKER. New RNA motifs sugges expanded scope for riboswitches in bacterial genetic control Proc Natl Acad Sci U S A Apr 27 2 6421-6426 101 3540 PFEFFER, S., M. ZAVOLAN, F. A. GRASSER, M. CHIEN, J. J. RUSSO, J. JU, B. JOHN, A. J. ENRIGHT, D. MARKS, C. SANDER and T. TUSCHL. Identification of virus-encoded microRNAs Science Apr 30 2004 734-736 304 3550 DORSETT, Y. and T. TUSCHL. siRNAs: applications in functional genomics and potential as therapeutics Nat Rev Drug Discov Apr 2004 318-329 3 3560 MALLORY, A. C. and H. VAUCHERET. MicroRNAs: something important between the genes Cu Opin Plant Biol Apr 2004 120-125 7 3570 OGITA, S., H. UEFUJI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for caffeine biosynthesis in coffee plants with potential for construction of decaffeinated varieties Plant Mol Biol Apr 2004 931-941 54 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, noncoding RNAs Curr Opin Microbiol Apr 2004 140-144 7 3590 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export Trends Cell II Apr 2004 156-159 14 3600 JABRI, E. RISCy business Nat Struct Mol Biol Apr 2004 300 11 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation Opin Cell Biol Apr 2004 127-133 16 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C130rf25, as a target for 13q31-q32 amplification malignant lymphoma Cancer Res May 1 2004 3087-3095 64 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK		00.10	
for duplex recognition and cleavage by eukaryotic RNase III: discovery of an RNA-dependent DNA cleavage activity of yeast Rnttp J Mol Biol Apr 23 2004 401-418 338 3530 BARRICK, J. E., K. A. CORBINO, W. C. WINKLER, A. NAHVI, M. MANDAL, J. COLLINS, M. LEE, ROTH, N. SUDARSAN, I. JONA, J. K. WICKISER and R. R. BREAKER. New RNA motifs sugges expanded scope for riboswitches in bacterial genetic control Proc Natl Acad Sci U S A Apr 27 2 6421-6426 101 3540 PFEFFER, S., M. ZAVOLAN, F. A. GRASSER, M. CHIEN, J. J. RUSSO, J. JU, B. JOHN, A. J. ENRIGHT, D. MARKS, C. SANDER and T. TUSCHL. Identification of virus-encoded microRNAs science Apr 30 2004 734-736 304 3550 DORSETT, Y. and T. TUSCHL. siRNAs: applications in functional genomics and potential as therapeutics Nat Rev Drug Discov Apr 2004 318-329 3 3560 MALLORY, A. C. and H. VAUCHERET. MicroRNAs: something important between the genes Cu Opin Plant Biol Apr 2004 120-125 7 3570 OGITA, S., H. UEFUJI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for caffeine biosynthesis in coffee plants with polential for construction of decaffeinated varieties Plant Mol Biol Apr 2004 931-941 54 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, noncoding RNAs Curr Opin Microbiol Apr 2004 140-144 7 3590 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export Trends Cell Apr 2004 156-159 14 3600 JABRI, E. RISCy business Nat Struct Mol Biol Apr 2004 300 11 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation Opin Cell Biol Apr 2004 127-133 16 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C130r/25, as a target for 13q31-q32 amplification and characterization of a novel gene, C130r/25, as a target for 13q31-q32 amplification and AHATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev		3520	
cleavage activity of yeast Rnt1p J Mol Biol Apr 23 2004 401-418 338 3530 BARRICK, J. E., K. A. CORBINO, W. C. WINKLER, A. NAHVI, M. MANDAL, J. COLLINS, M. LEE, ROTH, N. SUDARSAN, I. JONA, J. K. WICKISER and R. R. BREAKER. New RNA motifs sugges expanded scope for riboswitches in bacterial genetic control. Proc Natl Acad Sci U S A Apr 27 2 6421-6428 101 3540 PFEFFER, S., M. ZAVOLAN, F. A. GRASSER, M. CHIEN, J. J. RUSSO, J. JU, B. JOHN, A. J. ENRIGHT, D. MARKS, C. SANDER and T. TUSCHL. Identification of virus-encoded microRNAs Science Apr 30 2004 734-736 304 3550 DORSETT, Y. and T. TUSCHL. siRNAs: applications in functional genomics and potential as therapeutics Nat Rev Drug Discov Apr 2004 318-329 3 3560 MALLORY, A. C. and H. VAUCHERET. MicroRNAs: something important between the genes Cu Opin Plant Biol Apr 2004 120-125 7 3570 OGITA, S., H. UEFUJI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for caffeine biosynthesis in coffee plants with potential for construction of decaffeinated varieties. Plant Mol Biol Apr 2004 931-941 54 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, noncoding RNAs Curr Opin Microbiol Apr 2004 140-144 7 3590 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export. Trends Cell In Apr 2004 156-159 14 3600 JABRI, E. RISCy business. Nat Struct Mol Biol. Apr. 2004 300 11 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation Opin Cell Biol. Apr. 2004 127-133 16 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C1330r25, as a target for 13q31-q32 amplification malignant lymphoma Cancer Res. May 1. 2004 3087-3095 64 3640 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK and Y. GLEBA. In planta engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium. Proc. Natl Acad. Sci.	1	0020	
 BARRICK, J. E., K. A. CORBINO, W. C. WINKLER, A. NAHVI, M. MANDAL, J. COLLINS, M. LEE, ROTH, N. SUDARSAN, I. JONA, J. K. WICKISER and R. R. BREAKER. New RNA motifs sugges expanded scope for riboswitches in bacterial genetic control. Proc Natl Acad Sci U S A Apr 27 2 6421-6426 101 3540 PFEFER, S., M. ZAVOLAN, F. A. GRASSER, M. CHIEN, J. J. RUSSO, J. JU, B. JOHN, A. J. ENRIGHT, D. MARKS, C. SANDER and T. TUSCHL. Identification of virus-encoded microRNAs Science Apr 30 2004 734-736 304 3550 DORSETT, Y. and T. TUSCHL. siRNAs: applications in functional genomics and potential as therapeutics Nat Rev Drug Discov Apr 2004 318-329 3 3660 MALLORY, A. C. and H. VAUCHERET. MicroRNAs: something important between the genes Cu Opin Plant Biol. Apr 2004 120-125 7 3570 OGITA, S., H. UEFUJI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for caffeine biosynthesis in coffee plants with potential for construction of decaffeinated varieties. Plant Mol Biol. Apr. 2004 931-941 54 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, noncoding RNAs Curr Opin Microbiol. Apr. 2004 140-144 7 3590 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export. Trends Cell. Apr. 2004 156-159 14 3600 JABRI, E. RISCy business Nat Struct Mol Biol. Apr. 2004 300 11 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation Opin Cell Biol. Apr. 2004 127-133 16 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification malignant lymphoma. Cancer Res. May 1. 2004 3087-3095 64 3630 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK and Y. GLEBA. In planta engineering of viral RNA replicons: efficient assembly by recombination	Ì		
ROTH, N. SUDARSAN, I. JONA, J. K. WICKISER and R. R. BREAKER. New RNA motifs sugges expanded scope for riboswitches in bacterial genetic control. Proc Natl Acad Sci U S A Apr 27 2 6421-6426 101 3540 PFEFFER, S., M. ZAVOLAN, F. A. GRASSER, M. CHIEN, J. J. RUSSO, J. JU, B. JOHN, A. J. ENRIGHT, D. MARKS, C. SANDER and T. TUSCHL. Identification of virus-encoded microRNAs science. Apr 30 2004 734-736 304 3550 DORSETT, Y. and T. TUSCHL. siRNAs: applications in functional genomics and potential as therapeutics. Nat Rev Drug Discov. Apr 2004 318-329 3 3560 MALLORY, A. C. and H. VAUCHERET. MicroRNAs: something important between the genes. Cu. Opin Plant Biol. Apr 2004 120-125 7 3570 OGITA, S., H. UEFUJI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for caffeine biosynthesis in coffee plants with potential for construction of decaffeinated varieties. Plant Mol Biol. Apr. 2004 931-941 54 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNAs tability and translation with small, noncoding RNAs. Curr Opin Microbiol. Apr. 2004 140-144 7 3590 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export. Trends Cell. Apr. 2004 156-159 14 3600 JABRI, E. RISCy business. Nat Struct Mol Biol. Apr. 2004 300 11 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation. Opin Cell. Biol. Apr. 2004 127-133 16 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification and increased process of the		3530	BARRICK J. E. K. A. CORRINO W. C. WINKLER A. NAHVI. M. MANDAL J. COLLINS, M. LEE, A.
expanded scope for riboswitches in bacterial genetic control. Proc Natl Acad Sci U.S. A. Apr. 27 2 6421-6426 101 3540 PFEFER, S., M. ZAVOLAN, F. A. GRASSER, M. CHIEN, J. J. RUSSO, J. JU, B. JOHN, A. J. ENRIGHT, D. MARKS, C. SANDER and T. TUSCHL. Identification of virus-encoded microRNAs Science Apr. 30 2004 734-736 304 3550 DORSETT, Y. and T. TUSCHL. siRNAs: applications in functional genomics and potential as therapeutics. Nat Rev Drug Discov. Apr. 2004 318-329 3 3560 MALLORY, A. C. and H. VAUCHERET. MicroRNAs: something important between the genes. Cu Opin Plant Biol. Apr. 2004 120-125 7 3570 OGITA, S., H. UEFUJI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for caffeine biosynthesis in coffee plants with potential for construction of decaffeinated varieties. Plant Mol. Biol. Apr. 2004 931-941 54 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNAs stability and translation with small, noncoding RNAs. Curr Opin Microbiol. Apr. 2004 140-144 7 3590 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export. Trends Cell. Apr. 2004 156-159. 14 3600 JABRI, E. RISCy business. Nat Struct Mol. Biol. Apr. 2004 300. 11 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation. Opin Cell. Biol. Apr. 2004 127-133. 16 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET. Identification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification and general control of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium. Proc. Natl Acad. Sci. U.S. A. May 4. 2004. 6852-6857. 101 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets. Genes. Dev. May 15. 2004. 1165-1178. 18	1	3330	BOTH N. SUDARSAN I. JONA J. K. WICKISER and R. R. RREAKER. New RNA motifs suggest an
S421-6426 101			
PFEFFER, S., M. ZAVOLAN, F. A. GRASSER, M. CHIEN, J. J. RUSSO, J. JU, B. JOHN, A. J. ENRIGHT, D. MARKS, C. SANDER and T. TUSCHL. Identification of virus-encoded microRNAs science Apr 30 2004 734-736 304 3550 DORSETT, Y. and T. TUSCHL. siRNAs: applications in functional genomics and potential as therapeutics Nat Rev Drug Discov Apr 2004 318-329 3 3560 MALLORY, A. C. and H. VAUCHERET. MicroRNAs: something important between the genes Cu Opin Plant Biol Apr 2004 120-125 7 3570 OGITA, S., H. UEFUJI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for caffeine biosynthesis in coffee plants with potential for construction of decaffeinated varieties Plant Mol Biol Apr 2004 931-941 54 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, noncoding RNAs Curr Opin Microbiol Apr 2004 140-144 7 3590 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export Trends Cell Apr 2004 156-159 14 3600 JABRI, E. RISCy business Nat Struct Mol Biol Apr 2004 300 11 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation Opin Cell Biol Apr 2004 127-133 16 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification and characterizations: efficient assembly by recombination of DNA modules delivered Agrobacterium Proc Natl Acad Sci U S A May 4 2004 6852-6857 101 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev May 15 2004 1165-1178 18	1		· ·
ENRIGHT, D. MARKS, C. SANDER and T. TUSCHL. Identification of virus-encoded microRNAs Science Apr 30 2004 734-736 304 3550 DORSETT, Y. and T. TUSCHL. SIRNAs: applications in functional genomics and potential as therapeutics Nat Rev Drug Discov Apr 2004 318-329 3 3560 MALLORY, A. C. and H. VAUCHERET. MicroRNAs: something important between the genes Cu Opin Plant Biol Apr 2004 120-125 7 3570 OGITA, S., H. UEFUJI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for caffeine biosynthesis in coffee plants with potential for construction of decaffeinated varieties Plant Mol Biol Apr 2004 931-941 54 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, noncoding RNAs Curr Opin Microbiol Apr 2004 140-144 7 3590 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export Trends Cell I Apr 2004 156-159 14 3600 JABRI, E. RISCy business Nat Struct Mol Biol Apr 2004 300 11 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulatior Opin Cell Biol Apr 2004 127-133 16 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification malignant lymphoma Cancer Res May 1 2004 3087-3095 64 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK and Y. GLEBA. In planta engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium Proc Natl Acad Sci U S A May 4 2004 6852-6857 101 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev May 15 2004 1165-1178 18		3540	DEEEEER S. M. ZAVOLAN E. A. GRASSER M. CHIEN, J. J. BUSSO, J. JU. B. JOHN, A. J.
Science Apr 30 2004 734-736 304 3550 DORSETT, Y. and T. TUSCHL. siRNAs: applications in functional genomics and potential as therapeutics Nat Rev Drug Discov Apr 2004 318-329 3 3560 MALLORY, A. C. and H. VAUCHERET. MicroRNAs: something important between the genes Cu Opin Plant Biol Apr 2004 120-125 7 3570 OGITA, S., H. UEFUJI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for caffeine biosynthesis in coffee plants with potential for construction of decaffeinated varieties Plant Mol Biol Apr 2004 931-941 54 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, noncoding RNAs Curr Opin Microbiol Apr 2004 140-144 7 3590 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export Trends Cell I Apr 2004 156-159 14 3600 JABRI, E. RISCy business Nat Struct Mol Biol Apr 2004 300 11 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation Opin Cell Biol Apr 2004 127-133 16 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification malignant lymphoma Cancer Res May 1 2004 3087-3095 64 3630 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK and Y. GLEBA. In planta engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium Proc Natl Acad Sci U S A May 4 2004 6852-6857 101 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev May 15 2004 1165-1178 18 VAUCHERET, H., F. VAZQUEZ, P. CRETE and D. P. BARTEL. The action of ARGONAUTE1 in the store of the process of the process of the process of the process of the process of the process of the process of the process of the process of the process of the process of the process of the process of	1	3540	
DORSETT, Y. and T. TUSCHL. siRNAs: applications in functional genomics and potential as therapeutics Nat Rev Drug Discov Apr 2004 318-329 3 MALLORY, A. C. and H. VAUCHERET. MicroRNAs: something important between the genes Cu Opin Plant Biol Apr 2004 120-125 7 3570 OGITA, S., H. UEFUJI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for caffeine biosynthesis in coffee plants with potential for construction of decaffeinated varieties Plant Mol Biol Apr 2004 931-941 54 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, noncoding RNAs Curr Opin Microbiol Apr 2004 140-144 7 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export. Trends Cell I Apr 2004 156-159 14 3600 JABRI, E. RISCy business Nat Struct Mol Biol Apr 2004 300 11 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation Opin Cell Biol Apr 2004 127-133 16 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C13or/25, as a target for 13q31-q32 amplification malignant lymphoma. Cancer Res. May 1 2004 307-3095 64 3630 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK and Y. GLEBA. In planta engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium Proc Natl Acad Sci U S A. May 4 2004 6852-6857 101 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev. May 15 2004 1165-1178 18 VAUCHERET, H., F. VAZQUEZ, P. CRETE and D. P. BARTEL. The action of ARGONAUTE1 in the second computation of DNA products in the process of the product of the product of the product of the product of the product of the product of the product of the product of the product of the product of the product of the product of the product of the produ	1		
therapeutics Nat Rev Drug Discov Apr 2004 318-329 3 3560 MALLORY, A. C. and H. VAUCHERET. MicroRNAs: something important between the genes Cu Opin Plant Biol Apr 2004 120-125 7 3570 OGITA, S., H. UEFUJI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for caffeine biosynthesis in coffee plants with potential for construction of decaffeinated varieties. Plant Mol Biol Apr 2004 931-941 54 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, noncoding RNAs Curr Opin Microbiol Apr 2004 140-144 7 3590 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export. Trends Cell I Apr 2004 156-159 14 3600 JABRI, E. RISCy business. Nat Struct Mol Biol. Apr. 2004 300 11 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation. Opin Cell Biol. Apr. 2004 127-133 16 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification and intermediate and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification and engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium Proc Natl Acad Sci U S A. May 4. 2004 6852-6857 101 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev. May 15. 2004 1165-1178 18 VAUCHERET, H., F. VAZQUEZ, P. CRETE and D. P. BARTEL. The action of ARGONAUTE1 in the store of the process of the process of the process of the process of the process of the process of the process of the process of the process of the process of the process of the		3550	DORSETT Y and T TUSCHL, siRNAs; applications in functional genomics and potential as
3560 MALLORY, A. C. and H. VAUCHERET. MicroRNAs: something important between the genes Cu Opin Plant Biol Apr 2004 120-125 7 3570 OGITA, S., H. UEFUJI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for caffeine biosynthesis in coffee plants with potential for construction of decaffeinated varieties Plant Mol Biol Apr 2004 931-941 54 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, noncoding RNAs Curr Opin Microbiol Apr 2004 140-144 7 3590 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export Trends Cell I Apr 2004 156-159 14 3600 JABRI, E. RISCy business Nat Struct Mol Biol Apr 2004 300 11 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation Opin Cell Biol Apr 2004 127-133 16 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification malignant lymphoma Cancer Res May 1 2004 3087-3095 64 3630 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK and Y. GLEBA. In planta engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium Proc Natl Acad Sci U S A May 4 2004 6852-6857 101 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev May 15 2004 1165-1178 18	1	0000	
Opin Plant Biol Apr 2004 120-125 7 3570 OGITA, S., H. UEFUJI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for caffeine biosynthesis in coffee plants with potential for construction of decaffeinated varieties Plant Mol Biol Apr 2004 931-941 54 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, noncoding RNAs Curr Opin Microbiol Apr 2004 140-144 7 3590 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export Trends Cell I Apr 2004 156-159 14 3600 JABRI, E. RISCy business Nat Struct Mol Biol Apr 2004 300 11 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulatior Opin Cell Biol Apr 2004 127-133 16 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification malignant lymphoma Cancer Res May 1 2004 3087-3095 64 3630 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK and Y. GLEBA. In planta engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium Proc Natl Acad Sci U S A May 4 2004 6852-6857 101 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev May 15 2004 1165-1178 18		3560	MALLORY, A. C. and H. VAUCHERET. MicroRNAs: something important between the genes. Curr
3570 OGITA, S., H. UEFUJI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromin the major intermediate for caffeine biosynthesis in coffee plants with potential for construction of decaffeinated varieties. Plant Mol Biol. Apr. 2004. 931-941. 54. 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, noncoding RNAs. Curr Opin Microbiol. Apr. 2004. 140-144. 7. 3590 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export. Trends Cell. I. Apr. 2004. 156-159. 14. 3600 JABRI, E. RISCy business. Nat Struct Mol Biol. Apr. 2004. 300. 11. 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation. Opin Cell Biol. Apr. 2004. 127-133. 16. 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET. Identification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification. malignant lymphoma. Cancer Res. May 1. 2004. 3087-3095. 64. 3630 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK and Y. GLEBA. In planta. engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered. Agrobacterium. Proc. Natl. Acad. Sci. U.S. A. May 4. 2004. 6852-6857. 101. 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets. Genes. Dev. May 15. 2004. 1165-1178. 18. 3650 VAUCHERET, H., F. VAZQUEZ, P. CRETE and D. P. BARTEL. The action of ARGONAUTE1 in total carrier and carrier and carrier and carrier and carrier and carrier and carrier and carrier and carrier and carrier and carrier and carrier and computational carrier and carrier and carrier and carrier and computational carrier and carrier and carrier and carrier and carrier and carrier and carrier and carrier and carrier and carrier and carrier and carrier and carrier and carrier and carrier and carrier and carrier and carrier and carrie	- 1		
the major intermediate for caffeine biosynthesis in coffee plants with potential for construction of decaffeinated varieties. Plant Mol Biol. Apr. 2004. 931-941. 54. 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, noncoding RNAs. Curr. Opin Microbiol. Apr. 2004. 140-144. 7. KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export. Trends Cell. I. Apr. 2004. 156-159. 14. 3600 JABRI, E. RISCy business. Nat Struct Mol Biol. Apr. 2004. 300. 11. 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation. Opin Cell. Biol. Apr. 2004. 127-133. 16. 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET. Identification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification. malignant lymphoma. Cancer. Res. May 1. 2004. 3087-3095. 64. 3630 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK and Y. GLEBA. In planta. engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium. Proc. Natl. Acad. Sci. U. S. A. May 4. 2004. 6852-6857. 101. 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets. Genes. Dev. May 15. 2004. 1165-1178. 18. 3650 VAUCHERET, H., F. VAZQUEZ, P. CRETE and D. P. BARTEL. The action of ARGONAUTE1 in the structure of the category and translation and translation and computation of the processor.		3570	OGITA S. H. LIFFILLI, M. MORIMOTO and H. SANO. Application of RNAi to confirm theobromine as
decaffeinated varieties Plant Mol Biol Apr 2004 931-941 54 3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, noncoding RNAs Curr Opin Microbiol Apr 2004 140-144 7 3590 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export Trends Cell I Apr 2004 156-159 14 3600 JABRI, E. RISCy business Nat Struct Mol Biol Apr 2004 300 11 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation Opin Cell Biol Apr 2004 127-133 16 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification malignant lymphoma Cancer Res May 1 2004 3087-3095 64 3630 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK and Y. GLEBA. In planta engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium Proc Natl Acad Sci U S A May 4 2004 6852-6857 101 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev May 15 2004 1165-1178 18		0070	the major intermediate for caffeine biosynthesis in coffee plants with potential for construction of
3580 STORZ, G., J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small, noncoding RNAs Curr Opin Microbiol Apr 2004 140-144 7 3590 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export Trends Cell II Apr 2004 156-159 14 3600 JABRI, E. RISCy business Nat Struct Mol Biol Apr 2004 300 11 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation Opin Cell Biol Apr 2004 127-133 16 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification malignant lymphoma Cancer Res May 1 2004 3087-3095 64 3630 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK and Y. GLEBA. In planta engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium Proc Natl Acad Sci U S A May 4 2004 6852-6857 101 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev May 15 2004 1165-1178 18			
noncoding RNAs Curr Opin Microbiol Apr 2004 140-144 7 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export Trends Cell I Apr 2004 156-159 14 3600 JABRI, E. RISCy business Nat Struct Mol Biol Apr 2004 300 11 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation Opin Cell Biol Apr 2004 127-133 16 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification malignant lymphoma Cancer Res May 1 2004 3087-3095 64 3630 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK and Y. GLEBA. In planta engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium Proc Natl Acad Sci U S A May 4 2004 6852-6857 101 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev May 15 2004 1165-1178 18		3580	STORZ G. J. A. OPDYKE and A. ZHANG. Controlling mRNA stability and translation with small.
 KIM, V. N. MicroRNA precursors in motion: exportin-5 mediates their nuclear export Trends Cell I Apr 2004 156-159 14 3600 JABRI, E. RISCy business Nat Struct Mol Biol Apr 2004 300 11 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation Opin Cell Biol Apr 2004 127-133 16 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification malignant lymphoma Cancer Res May 1 2004 3087-3095 64 3630 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK and Y. GLEBA. In planta engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium Proc Natl Acad Sci U S A May 4 2004 6852-6857 101 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev May 15 2004 1165-1178 18 3650 VAUCHERET, H., F. VAZQUEZ, P. CRETE and D. P. BARTEL. The action of ARGONAUTE1 in to 	ı	5555	
Apr 2004 156-159 14 3600 JABRI, E. RISCy business Nat Struct Mol Biol Apr 2004 300 11 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation Opin Cell Biol Apr 2004 127-133 16 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification malignant lymphoma Cancer Res May 1 2004 3087-3095 64 3630 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK and Y. GLEBA. In planta engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium Proc Natl Acad Sci U S A May 4 2004 6852-6857 101 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev May 15 2004 1165-1178 18		3590	KIM, V. N. MicroRNA precursors in motion; exportin-5 mediates their nuclear export. Trends Cell Biol
JABRI, E. RISCy business Nat Struct Mol Biol Apr 2004 300 11 3610 NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation Opin Cell Biol Apr 2004 127-133 16 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification malignant lymphoma Cancer Res May 1 2004 3087-3095 64 3630 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK and Y. GLEBA. In planta engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium Proc Natl Acad Sci U S A May 4 2004 6852-6857 101 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev May 15 2004 1165-1178 18 3650 VAUCHERET, H., F. VAZQUEZ, P. CRETE and D. P. BARTEL. The action of ARGONAUTE1 in t		""	
NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation Opin Cell Biol. Apr. 2004. 127-133. 16 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification malignant lymphoma. Cancer Res. May 1. 2004. 3087-3095. 64 3630 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK and Y. GLEBA. In planta engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium. Proc. Natl. Acad. Sci. U.S. A. May 4. 2004. 6852-6857. 101 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets. Genes. Dev. May 15. 2004. 1165-1178. 18 3650 VAUCHERET, H., F. VAZQUEZ, P. CRETE and D. P. BARTEL. The action of ARGONAUTE1 in the section of ARGONAUTE1.		3600	
Opin Cell Biol Apr 2004 127-133 16 3620 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification malignant lymphoma Cancer Res May 1 2004 3087-3095 64 3630 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK and Y. GLEBA. In planta engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium Proc Natl Acad Sci U S A May 4 2004 6852-6857 101 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev May 15 2004 1165-1178 18 3650 VAUCHERET, H., F. VAZQUEZ, P. CRETE and D. P. BARTEL. The action of ARGONAUTE1 in the section		NAKAHARA, K. and R. W. CARTHEW. Expanding roles for miRNAs and siRNAs in cell regulation. Curr	
 OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SET Identification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification malignant lymphoma. Cancer Res. May 1 2004 3087-3095 64 3630 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK and Y. GLEBA. In planta engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium. Proc. Natl. Acad. Sci. U.S. A. May 4 2004 6852-6857 101 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets. Genes. Dev. May 15 2004 1165-1178 18 3650 VAUCHERET, H., F. VAZQUEZ, P. CRETE and D. P. BARTEL. The action of ARGONAUTE1 in the section of ARGONAUTE1. 	i		
Identification and characterization of a novel gene, C13orf25, as a target for 13q31-q32 amplification malignant lymphoma Cancer Res May 1 2004 3087-3095 64 3630 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK and Y. GLEBA. In planta engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium Proc Natl Acad Sci U S A May 4 2004 6852-6857 101 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev May 15 2004 1165-1178 18 3650 VAUCHERET, H., F. VAZQUEZ, P. CRETE and D. P. BARTEL. The action of ARGONAUTE1 in the section of ARGON		3620	OTA, A., H. TAGAWA, S. KARNAN, S. TSUZUKI, A. KARPAS, S. KIRA, Y. YOSHIDA and M. SETO.
malignant lymphoma Cancer Res May 1 2004 3087-3095 64 3630 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK and Y. GLEBA. In planta engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium Proc Natl Acad Sci U S A May 4 2004 6852-6857 101 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev May 15 2004 1165-1178 18 3650 VAUCHERET, H., F. VAZQUEZ, P. CRETE and D. P. BARTEL. The action of ARGONAUTE1 in t	l		
 3630 MARILLONNET, S., A. GIRITCH, M. GILS, R. KANDZIA, V. KLIMYUK and Y. GLEBA. In planta engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium Proc Natl Acad Sci U S A May 4 2004 6852-6857 101 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev May 15 2004 1165-1178 18 3650 VAUCHERET, H., F. VAZQUEZ, P. CRETE and D. P. BARTEL. The action of ARGONAUTE1 in total computation. 	Ì		
engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered Agrobacterium Proc Natl Acad Sci U S A May 4 2004 6852-6857 101 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev May 15 2004 1165-1178 18 3650 VAUCHERET, H., F. VAZQUEZ, P. CRETE and D. P. BARTEL. The action of ARGONAUTE1 in t		3630	
Agrobacterium Proc Natl Acad Sci U S A May 4 2004 6852-6857 101 3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev May 15 2004 1165-1178 18 3650 VAUCHERET, H., F. VAZQUEZ, P. CRETE and D. P. BARTEL. The action of ARGONAUTE1 in t	1		engineering of viral RNA replicons: efficient assembly by recombination of DNA modules delivered by
3640 KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELAT and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev May 15 2004 1165-1178 18 3650 VAUCHERET, H., F. VAZQUEZ, P. CRETE and D. P. BARTEL. The action of ARGONAUTE1 in t			
and A. HATZIGEORGIOU. A combined computational-experimental approach predicts human microRNA targets Genes Dev May 15 2004 1165-1178 18 3650 VAUCHERET, H., F. VAZQUEZ, P. CRETE and D. P. BARTEL. The action of ARGONAUTE1 in t		3640	KIRIAKIDOU, M., P. T. NELSON, A. KOURANOV, P. FITZIEV, C. BOUYIOUKOS, Z. MOURELATOS
microRNA targets Genes Dev May 15 2004 1165-1178 18 3650 VAUCHERET, H., F. VAZQUEZ, P. CRETE and D. P. BARTEL. The action of ARGONAUTE1 in t			
3650 VAUCHERET, H., F. VAZQUEZ, P. CRETE and D. P. BARTEL. The action of ARGONAUTE1 in t			microRNA targets Genes Dev May 15 2004 1165-1178 18
miRNA pathway and its regulation by the miRNA pathway are crucial for plant development. Gene-		3650	VAUCHERET, H., F. VAZQUEZ, P. CRETE and D. P. BARTEL. The action of ARGONAUTE1 in the
I I limitati bantaa) and to todamicit by the ninitati bantaa) are stated to begin development desired			miRNA pathway and its regulation by the miRNA pathway are crucial for plant development. Genes Dev
May 15 2004 1187-1197 18			May 15 2004 1187-1197 18
3660 CHAPMAN, E. J., A. I. PROKHNEVSKY, K. GOPINATH, V. V. DOLJA and J. C. CARRINGTON.		3660	CHAPMAN, E. J., A. I. PROKHNEVSKY, K. GOPINATH, V. V. DOLJA and J. C. CARRINGTON. Viral
			RNA silencing suppressors inhibit the microRNA pathway at an intermediate step. Genes Dev. May 15
2004 1179-1186 18			
, / 3690 POOGGIN, M. and T. HOHN. Fighting geminiviruses by RNAi and vice versa Plant Mol Biol May	$\overline{\mathcal{A}}$	3690	POOGGIN, M. and T. HOHN. Fighting geminiviruses by RNAi and vice versa Plant Mol Biol May
2004 149-152 55	\bigvee		2004 149-152 55

Francis of Cine Avenue	Date Considered
Evaminer Signature:	Date Considered.

10/709,739 May 26, 2004

Filing Date First Inventor

Docket Number

Itzhak Bentwich

Art Unit

1631

Examiner

CLOW, LORI A 050992.0302.CPUS00

Information Disclosure Statement

		NON PATENT LITERATURE DOCUMENTS
Examiner		
Initials	Cite No#	Authors, Title, Journal, Date, Year, Pages, Volume
,	3700	BARTEL, D. P. and C. Z. CHEN. Micromanagers of gene expression: the potentially widespread
l {		influence of metazoan microRNAs Nat Rev Genet May 2004 396-400 5
	3710	DUNOYER, P., C. H. LECELLIER, E. A. PARIZOTTO, C. HIMBER and O. VOINNET. Probing the
		microRNA and small interfering RNA pathways with virus-encoded suppressors of RNA silencing Plant
		Cell May (Epub 2004 Apr 14(2004 1235-1250 16

Examiner Signature: Date Considered: 8/22/07